DISTRIBUTION OF FISHERY PRODUCTS

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HEARINGS

BEFORE A

SUBCOMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

EIGHTY-THIRD CONGRESS

SECOND SESSION

ON

H. R. 4303, H. R. 5829, H. R. 7441, H. R. 7641, and H. R. 7671

TO FURTHER ENCOURAGE THE DISTRIBUTION OF FISHING PRODUCTS, AND FOR OTHER PURPOSES

APRIL 2 AND 3, 1954

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DISTRIBUTION OF FISHERY PRODUCTS

FRIDAY, APRIL 2, 1954

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
SUBCOMMITTEE ON SHELLFISH AND
SALT WATER FISHERIES,
Washington, D. C.

The subcommittee met at 10 a. m., Hon. Walter Norblad (acting chairman of the subcommittee) presiding.

Mr. NORBLAD. The committee will please come to order.

The Chair would like to state that while this meeting was called primarily at the request of Mr. Bates, of Massachusetts, to consider his bill, which we will do, there are also several other bills, one by Mr. O'Neill, one by Mr. Knox, and one by Mr. Lane on the same subject. There is some difference in the legislation but they will all be considered at this time.

The House, as you may know, goes into session at 11 o'clock today. We will not adjourn the committee promptly at 11, but we will take testimony until the bells ring for a quorum. If we do not finish today and any of you gentlemen wish to be heard tomorrow we will have a hearing on Saturday morning.

[H. R. 4303, 83d Cong., 1st sess.]

A BILL To further encourage the distribution of fishery products, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act of August 11, 1939 (53 Stat. 1411), is hereby amended to read as follows:

"From the funds available to the Secretary of Agriculture to carry out the provisions of section 32 of the Act of August 24, 1935 (49 Stat. 774), as amended, $3,000,000 a year shall be transferred to the Secretary of the Interior to be used to encourage domestic consumption of surplus fishery products (including fish, shellfish, mollusks, and crustacea), by diverting them from the normal channels of trade and commerce, by acquiring them and providing for their distribution through Federal, State, and private relief channels: *Provided*, That none of the funds made available under this Act shall be used to purchase any of the commodities designated in this section which may have been produced in a foreign country. The provisions of law relating to the acquisition of materials and supplies for the United States shall not apply to the acquisition of commodities under this Act.

"SEC. 2. From the funds provided by section 1 hereof, the Secretary of the Interior shall maintain separate funds of $750,000, which shall be used by the Secretary of the Interior to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological and related research programs, the moneys so transferred to be also available for the purchase of or other acquisition, construction, equipment, operation, and maintenance of vessels or other facilities necessary for conducting research provided for in this section; and of $250,000 which shall be used by the Secretary of the Interior to develop and increase markets for fishery products of domestic origin.

"For the purposes of this section, any agency of the United States, or any corporation wholly owned by the United States, is authorized to transfer, without reimbursement or transfer of funds, any vessels or equipment excess to its needs required by the Secretary of the Interior for the activities, studies, and research authorized herein.

"SEC. 3. In carrying out the purposes and objectives of the foregoing, the Secretary of the Interior is directed as far as practicable to cooperate with and to use the facilities of the Department of Agriculture for the purchase and distribution of fishery products authorized herein, and the Secretary of the Interior is authorized to cooperate with other appropriate agencies of the Federal Government, with State or local governmental agencies, private agencies, organizations, or individuals, having jurisdiction over or an interest in fish or fishery commodities."

[H. R. 5829, 83d Cong., 1st sess.]

A BILL To further encourage the distribution of fishery products, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act of August 11, 1939 (53 Stat. 1411), is hereby amended to read as follows:

"(a) That from the funds available to the Secretary of Agriculture to carry out the provisions of section 32 of the Act of August 24, 1935 (49 Stat. 774), as amended, $1,000,000 a year shall be transferred to the Secretary of the Interior who shall maintain separate funds of (1) $750,000 which shall be used by him to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological and related research programs, the moneys so transferred to be also available for the purchase, or other acquisition, construction, equipment, operation, and maintenance of vessels or other facilities necessary for conducting research as provided in this section; and (2) $250,000 which shall be used by him to develop and increase markets for fishery products of domestic origin.

"(b) For the purposes of this section, any agency of the United States, or any corporation wholly owned by the United States, is authorized to transfer, without reimbursement or transfer of funds, any vessels or equipment excess to its needs required by the Secretary of the Interior for the activities, studies, and research authorized herein.

"SEC. 2. In carrying out the purposes and objectives of this Act, the Secretary of the Interior is directed as far as practicable to cooperate with other appropriate agencies of the Federal Government, with State or local governmental agencies, private agencies, organizations, or individuals, having jurisdiction over or an interest in fish or fishery commodities."

[H. R. 7441, 83d Cong., 2d sess.]

A BILL To further encourage the distribution of fishery products, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2 of the Act of August 11, 1939 (53 Stat. 1411), is hereby amended to read as follows:

"SEC. 2. (a) The Secretary of Agriculture shall transfer to the Secretary of the Interior each fiscal year, beginning with the fiscal year commencing July 1, 1954, from moneys made available to carry out the provisions of section 32 of such Act of August 24, 1935, an amount equal to 30 per centum of the gross receipts from duties collected under the customs laws on fishery products (including fish, shellfish, mollusks, and crustacea), which shall be maintianed in a separate fund and used by the Secretary of the Interior (1) to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological, biological, and related research programs, the moneys so transferred to be also available for the purchase or other acquisition, construction, equipment, operation, and maintenance of vessels or other facilities necessary for conducting research as provided for in this section, and (2) to develop and increase markets for fishery products of domestic origin.

"(b) For the purposes of this section, any agency of the United States, or any corporation wholly owned by the United States is authorized to transfer, without reimbursement or transfer of funds, any vessels or equipment excess to its needs required by the Secretary of the Interior for the activities, studies, and research authorized herein.

"(c) In carrying out the purposes and objectives of this section, the Secretary of the Interior is directed as far as practicable to cooperate with other appropriate agencies of the Federal Government, with State or local governmental agencies, organizations, or individuals, having jurisdiction over or an interest in fish or fishery commodities.

"(d) The Secretary of the Interior is further authorized to retransfer any of the funds made available under this section to the Secretary of Agriculture to be used for the purposes specified in section 1 of this Act."

[H. R. 7641, 83d Cong., 2d sess.]

A BILL To further encourage the distribution of fishery products, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2 of the Act of August 11, 1939 (53 Stat. 1411), is hereby amended to read as follows:

"SEC. 2. (a) The Secretary of Agriculture shall transfer to the Secretary of the Interior each fiscal year, beginning with the fiscal year commencing July 1, 1954, from moneys made available to carry out the provisions of section 32 of such Act of August 24, 1935, an amount equal to 30 per centum of the gross receipts from duties collected under the customs laws on fishery products (including fish, shellfish, mollusks, and crustacea), which shall be maintained in a separate fund and used by the Secretary of the Interior (1) to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological, biological and related research programs, the moneys so transferred to be also available for the purchase or other acquisition, construction, equipment, operation, and maintenance of vessels or other facilities necessary for conducting research as provided for in this section, and (2) to develop and increase markets for fishery products of domestic origin.

"(b) For the purposes of this section, any agency of the United States, or any corporation wholly owned by the United States, is authorized to transfer, without reimbursement or transfer of funds, any vessels or equipment excess to its needs required by the Secretary of the Interior for the activities, studies, and research authorized herein.

"(c) In carrying out the purposes and objectives of this section, the Secretary of the Interior is directed as far as practicable to cooperate with other appropriate agencies of the Federal Government, with State or local governmental agencies, private agencies, organizations, or individuals, having jurisdiction over or an interest in fish or fishery commodities.

"(d) The Secretary of the Interior is further authorized to retransfer any of the funds made available under this section to the Secretary of Agriculture to be used for the purposes specified in section 1 of this Act."

[H. R. 7671, 83d Cong., 2d sess.]

A BILL To amend the Act of August 11, 1939, so as to encourage further the distribution of fishery products and the development of markets for fishery products, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2 of the Act entitled "An Act to authorize the Federal Surplus Commodities Corporation to purchase and distribute surplus products of the fishing industry", approved August 11, 1939 (15 U. S. C., sec. 713c–3), is amended to read as follows:

"SEC. 2. (a) The Secretary of Agriculture is authorized and directed to transfer to the Secretary of the Interior, for the fiscal year 1955 and each subsequent fiscal year, from funds available to carry out section 32 of the Act of August 24, 1935 (49 Stat. 774), as amended, an amount equal to 30 per centum of the gross receipts from duties collected under the customs laws on fishery products (including fish, shellfish, mollusks, and crustacea). Amounts so transferred shall be maintained in a separate fund and used by the Secretary of the Interior—

"(1) to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological, biological, and related research programs, and to purchase, acquire, construct, equip, operate, and maintain the vessels and other facilities necessary for the conduct of research under this subparagraph; and

"(2) to develop and increase the markets for fishery products of domestic origin.

"(b) In carrying out this section the Secretary of the Interior shall cooperate, insofar as may be practicable, with other appropriate agencies of the Federal Government, with State and local governmental agencies, and with any other organizations and individuals having jurisdiction over or an interest in fish or fishery commodities.

"(c) To assist the Secretary of the Interior in carrying out this section, any agency of the Federal Government or any corporation wholly owned by the United States is authorized to transfer, without reimbursement or transfer of funds, any vessels or equipment which may be excess to its needs and required by the Secretary of the Interior for the activities, studies, and research provided for in subsection (a).

"(d) The Secretary of the Interior is authorized, in his discretion, to retransfer to the Secretary of Agriculture any of the funds made available under this section, for use in carrying out the purposes and provisions of the first section of this Act."

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D. C., August 27, 1953.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

MY DEAR MR. CHAIRMAN: This is in reply to your request for the views of this office concerning H. R. 4303, to further encourage the distribution of fishery products, and for other purposes.

Section 32 of the act of August 24, 1935 (49 Stat. 774), appropriated annually to the Department of Agriculture an amount equal to 30 percent of customs receipts for the preceding calendar year to be used in removing surplus agricultural commodities from the domestic market. By the act of August 11, 1939 (15 U. S. C. 713c–2), the Department of Agriculture was authorized to use not to exceed $1,500,000 annually of section 32 funds "for the purpose of diverting surplus fishery products * * * from the normal channels of trade and commerce by acquiring them and providing for their distribution through Federal, State, and private relief channels." The same act authorized the Secretary of Agriculture to transfer to the Secretary of the Interior annually $75,000 "to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service" and $100,000 annually "to develop and increase markets for fishery products of domestic origin." Funds have been made available to the Department of the Interior under this authority for a number of years, varying from $25,000 in fiscal 1941 to about $175,000 in recent fiscal years.

H. R. 4303 would amend the act of August 11, 1939, and make mandatory each year the transfer of $3 million of section 32 funds without any determination as to actual need. Of the amount so transferred, $1 million would be maintained in two separate funds, $750,000 to be used for education and research, and $250,000 for market development programs.

While section 3 of the bill authorizes and directs the Secretary of the Interior to cooperate with the Department of Agriculture and with other agencies, it also has the effect of granting authority for another agency of the Government to engage in the purchase, storage and disposal of a product in surplus supply. This duplicatory organization, with its attendant administrative costs, does not appear to be warranted.

We believe that the authorization of $1 million proposed in the bill for the conduct of research, etc., is undesirable. Section 2 of the bill would establish an annual appropriation for the conduct of research regardless of need. Such authority would remove the proposed research programs from annual review by the Congress as a part of the regular budgetary processes. It places a priority on certain types of research which, as time goes on, may be relatively low in priority in relation to other research activities.

In these circumstances, enactment of H. R. 4303 is not recommended.

Sincerely yours,

ROWLAND HUGHES, *Acting Director.*

DEPARTMENT OF AGRICULTURE,
Washington, D. C., September 4, 1953.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

DEAR MR. WEICHEL: This is in reply to your request for a report on H. R. 4303, a bill to further encourage the distribution of fishery products, and for other purposes.

The bill would require each year the transfer to the Secretary of the Interior of $3 million from funds made available to the Secretary of Agriculture by section 32 of the act of August 24, 1935, as amended. Such transferred funds would be used to encourage the domestic consumption of surplus fish and fish products, $1 million thereof to be maintained in separate funds to be used for education, research, and market-development programs. Under section 32, the Department of Agriculture carries out programs designed to encourage the domestic consumption and exportation of surplus agricultural commodities and products thereof. The act of August 11, 1939 (Public Law 393, 76th Cong.) authorizes this Department to use from section 32 funds an amount not in excess of $1,500,000 for the purchase and distribution, through public and private relief channels, of surplus fish and fish products, and to transfer annually to the Department of the Interior $175,000 of such sum for the development of domestic markets and for the conducting of a fishery educational service with respect to fish and fish products.

The bill makes the transfer of funds mandatory each year without any determination as to the need. Surpluses vary from year to year among the different commodities for which section 32 funds may be used. It is desirable, therefore, to retain the element of flexibility in the administration of funds for the procurement and distribution of commodities according to the relative importance of the surpluses.

H. R. 4303 would direct the Department of the Interior as far as practicable to cooperate with, and to use the facilities of, the Department of Agriculture for the purchase and distribution of fishery products. In view of the existing authority in this Department and the organization already established to administer food programs of the type specified in the bill, it does not appear advisable to authorize the division of the responsibility for such program operations between executive departments and thus authorize the duplication of administrative organizations which would perform essentially the same functions.

Such duplication would increase the administrative costs of carrying out section 32 food programs and thus reduce the amount of section 32 funds available for actual program operations.

The bill would increase from $175,000 to $1 million the amount of section 32 funds available for transfer annually by this Department to the Department of the Interior for educational and research programs and for the promotion of markets for fish and fish products. The present law merely permits the transfer annually of $175,000 for this purpose, whereas H. R. 4303 would make the transfer mandatory. The $1 million proposed for this purpose would come from the $3 million specified in the bill for transfer from section 32 funds to the Department of the Interior. The bill would also give the Department of the Interior the additional authority to use a part of these funds to conduct fishery technological and related research programs. The Department of Agriculture, through its Bureau of Human Nutrition and Home Economics, conducts research in nutrition and in the utilization of agricultural products as food and also maintains educational service to homes and institutions regarding all food products. The Department, through its plentiful foods program, works with the food trade to promote the distribution and consumption of those foods, including fish, which are in surplus supply. It would not seem advisable to expand such services in another Department not primarily concerned with the marketing and utilization of food products.

In view of the above, this Department recommends against passage of the bill.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

TRUE D. MORSE, *Under Secretary.*

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., April 1, 1954.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

MY DEAR MR. WEICHEL: Reference is made to your request for a report on several bills, H. R. 4303, H. R. 5829, H. R. 7441, H. R. 7641, and H. R. 7671, all entitled "To further encourage the distribution of fishery products, and for other purposes."

I strongly favor the objective of the program to be augmented by the proposed legislation.

Section 32 of the act of 1935 (49 Stat. 774; 7 U. S. C. 612c), as amended, appropriated and set apart annually in a special fund an amount equal to 30 percent of the annual gross receipts from the duties collected under the customs laws. This special fund was to be expended by the Secretary of Agriculture to encourage exportation and domestic consumption of agricultural products. Section 2 of the act of August 11, 1939 (53 Stat. 1411; 15 U. S. C. 713c–2), which would be amended by the proposed legislation, authorized the Secretary of Agriculture to transfer to the Secretary of the Interior from the special fund established by the 1935 act $75,000 for use in promoting "the free flow of domestically produced products in commerce by conducting a fishery educational service," and $100,000 to be used by the Secretary of the Interior "to develop and increase markets for fishery products of domestic origin." The proposed legislation insofar as it pertains to the availability and use of funds is simply an increase in these amounts to an amount equal to 30 percent of the gross receipts from duties collected under the customs laws from the importation of various fishery products. Since this phase is wholly amendatory of the existing act it is of course no departure from the methods set forth in the original act with respect to the availability of funds and hence we do not feel that it is necessary that we comment on budgetary aspects.

Unquestionably there is an acute need for greatly expanded research with respect to certain basic problems which the fishing industry itself cannot effectively finance or coordinate. This is particularly true with respect to technological and biological studies. The Department of the Interior, through the Fish and Wildlife Service, presently is attempting to solve some of these problems. As the agency primarily responsible for the welfare of the domestic fisheries, it collects and publishes basic statistics; conducts a daily market news service; makes economic studies; administers the Fishery Cooperative Marketing Act; develops methods of handling, utilizing, and preserving fishery products; conducts research on all technological fishery matters; conducts an educational service; develops foreign and domestic markets; explores for new fishing grounds; develops and tests fishing gear; conducts biological research on all our fisheries; and manages the fisheries of Alaska. Many of these activities have been limited, however, by a lack of available funds. If the fishing industry of this country is to continue to compete on an equal basis with the fishing industries of other countries, many of which are directly subsidized, it is essential that a substantial increase in funds for these purposes be made available.

As we have stated, the 1935 act established a special fund equal to 30 percent of the gross receipts collected from customs duties. The act made this fund and the annual accruals thereto available until expended with the proviso that the balance of the fund might not exceed $300 million at the end of any fiscal year. We suggest that the proposed amendment be further amended to the end that the fund proposed to be created be likewise limited and that such limitation be fixed at $5 million. This would permit accruals to the fund to offset or at least minimize fluctuations in the amounts derived from import duties on fishery products. The continuing availability of such a fund would make it possible for the Secretary of the Interior to plan research and development activities for the fishing industry on a long-term basis. In this connection, it also is suggested that the funds provided by this bill be made available directly to the Secretary of the Interior and not by way of a transfer from the Secretary of Agriculture.

In these circumstances, it is suggested that if the recommendations contained in this report are adopted, the activities contemplated by the bill be inaugurated in the fiscal year beginning July 1, 1954, by the supplementation in the amount of $1,800,000 of appropriations otherwise available, leaving a balance which could be paid into the reserve fund, the establishment of which is suggested.

It will be noted that in several of the bills the amounts proposed to be made available for promoting the free flow of domestically produced fishery products, the development of markets, and for the purchase of surplus fisheries are probably

less than an amount equal to 30 percent of the gross receipts from duties collected under the customs laws from the importation of various fishery products. However, in view of the comments and suggestions contained in this report, it does not appear necessary to consider each of these proposals separately.

Since this is a revised version of a report originally submitted to the Bureau of the Budget and in view of the urgency of making a report to your committee, it has not been possible to obtain the views of the Bureau of the Budget on this revised report.

Sincerely yours,

ORME LEWIS,
Assistant Secretary of the Interior.

DEPARTMENT OF AGRICULTURE,
Washington, D. C., September 23, 1953.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

DEAR MR. WEICHEL: This is in reply to your request for a report on H. R. 5829, a bill to further encourage the distribution of fishery products, and for other purposes.

The bill would require each year the transfer to the Secretary of the Interior of $1 million from funds made available to the Secretary of Agriculture by section 32 of the act of August 24, 1935, as amended. Such transferred funds would be maintained in separate accounts to be used to promote domestically produced fishery products in commerce by conducting educational, technological research and related research, as well as marketing programs.

Under section 32, the Department of Agriculture carries out programs designed to encourage the domestic consumption and exportation of surplus agricultural commodities and products thereof. The act of August 11, 1939 (Public Law 393, 76th Cong.), authorizes this Department to use from section 32 funds an amount not in excess of $1,500,000 each year for the purchase and distribution through public and private relief channels, of surplus fish and fish products, and to transfer annually to the Department of the Interior $175,000 of such sum for the development of domestic markets and for the conduct of a fishery educational service with respect to fish and fish products. Enactment of H. R. 5829 would amend Public Law 393, 76th Congress, to substitute mandatory authority transferring each year $1 million of section 32 funds to the Department of the Interior for educational programs and for the promotion of markets for fish and fish products, and would provide new authority permitting the use of a part of these funds to conduct fishery technological and related research programs.

The Department of Agriculture, through its Bureau of Human Nutrition and Home Economics, conducts research in nutrition and in the utilization of agricultural products, including fish, as food and also maintains educational service to homes and institutions regarding all food products. The Department, through its plentiful foods program, works with the food trade to promote the distribution and consumption of those foods, including fish, which are in surplus supply. It would not seem advisable to expand such services in another department not primarily concerned with the marketing and utilization of food products.

In view of the above, this Department recommends against passage of the bill.

The Bureau of the Budget advised that there is no objection to the submission of this report.

Sincerely yours,

TRUE D. MORSE,
Acting Secretary.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D. C., August 27, 1953.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

MY DEAR MR. CHAIRMAN: This is in reply to your letter requesting the views of this office with respect to H. R. 5829, to further encourage the distribution of fishery products, and for other purposes.

If enacted, this bill would amend those provisions of the act of August 11, 1939 (15 U. S. C. 713c–2) which authorize the Secretary of Agriculture to transfer to

the Secretary of the Interior from the so-called section 32 funds up to $75,000 annually "to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service" and up to $100,000 annually "to develop and increase markets for fishery products of domestic origin."

H. R. 5829 would change these provisions by making it mandatory for the Secretary of Agriculture to transfer $1 million to be maintained in two separate funds, $750,000 for use on education and research, and $250,000 for market development programs.

We believe that the present method of financing this program is contrary to sound budgetary practice, first, because it removes the program from review by the President and the Congress as a part of the annual budget process and, second, because it tends to restrict the authority of the agency head to achieve a proper balance among the programs under his direction. The amendment proposed in H. R. 5829 would make the existing situation even more undesirable by removing the discretion now exercised by the Secretary of Agriculture over the amounts to be transferred, and by increasing the amounts themselves.

Under these circumstances, the Bureau of the Budget recommends that H. R. 5829 not be enacted.

Sincerely yours,

ROWLAND HUGHES,
Acting Director.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D. C., February 25, 1954.

HON. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives, Washington, D. C.

MY DEAR MR. CHAIRMAN: This is in reply to the request of your committee for the views of this office with respect to H. R. 7441 and H. R. 7641, bills to further encourage the distribution of fishery products, and for other purposes, and H. R. 7671 to amend the act of August 11, 1939, so as to encourage further the distribution of fishery products and the development of markets for fishery products, and for other purposes.

All three of these bills would amend the act of August 11, 1939, by making it mandatory for the Secretary of Agriculture to transfer to the Secretary of the Interior a portion of the funds appropriated to the Department of Agriculture under section 32 of the act of August 24, 1935, equal to 30 percent of the customs receipts on fishery products. The bills would direct the Secretary of the Interior to use the funds (1) to promote the free flow of domestically produced fishery products by conducting a fishery educational service and a fishery research program, and (2) to develop and increase markets for fishery products of domestic origin.

This Bureau has recommended against the enactment of similar legislation introduced in the 1st session of the 83d Congress. In our reports on two of these measures, H. R. 4303 and H. R. 5829, we pointed out that the financial procedure established by the act of August 11, 1939, was in itself contrary to sound budgetary practice, first, because it removed the program from review by the President and the Congress as a part of the annual budget process and, second, because it tends to restrict the authority of the agency head to achieve a proper balance among the programs under his direction. We also stated that the proposal would, by removing the discretion now exercised by the Secretary of Agriculture over the amounts to be transferred and by increasing the amounts themselves, make the existing situation even more undesirable.

By tying the amounts of the transfers to a portion of the section 32 funds which the bills presume to be derived from duties on fishery imports, the current legislation raises an even more serious problem. If enacted these provisions would, in effect, establish a precedent for a commodity-by-commodity earmarking of the moneys appropriated under the section 32 provisions.

In view of the above, the Bureau of the Budget recommends that the subject legislation not be enacted.

Sincerely yours,

ROWLAND HUGHES, *Deputy Director.*

DEPARTMENT OF AGRICULTURE,
Washington, D. C., March 2, 1954.

Hon. ALVIN F. WEICHEL,
Chairman, Committee on Merchant Marine and Fisheries,
United States House of Representatives.

DEAR MR. WEICHEL: This is in reply to requests, submitted by Mr. Leonard P. Pliska, chief clerk of your committee, for reports on H. R. 7441, H. R. 7641, and H. R. 7671, bills to further encourage the distribution of fishery products and for other purposes.

These bills would amend the act of August 11, 1939 (Public Law 393, 76th Cong.). Section 1 of that act authorizes the Department of Agriculture to use each year from section 32 funds an amount not in excess of $1,500,000 for the purchase and distribution, through public and private relief channels, of surplus fish and fish products. Section 2 of that act authorizes this Department to transfer annually to the Department of the Interior $175,000 of such sum for the development of domestic markets and for conducting a fishery educational service with respect to fish and fish products.

These bills would amend section 2 of the above act. It would require that each year the Secretary of Agriculture transfer to the Secretary of the Interior an amount of section 32 funds equal to 30 percent of the gross receipts from duties collected under the customs laws on fishery products. These moneys would be maintained in a separate fund by the Secretary of the Interior to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery research programs, and to develop and increase markets for fishery products. The Secretary of the Interior would be further authorized to retransfer funds available under this section to the Secretary of Agriculture to be used for the purposes specified in section 1 of the act, i. e., the purchase and distribution of surplus fishery products.

On the basis of the duties collected on fishery products during 1953, these bills would require the annual transfer of approximately $3 million of section 32 funds for the above purposes.

The Department does not believe that a mandatory assignment of section 32 funds should be made each year for use in connection with fishery products, without any determination as to the need of such products for marketing assistance. Surpluses vary from year to year among the different commodities for which section 32 funds may be used. It is desirable, therefore, to retain maximum flexibility in the administration of such funds for procurement and distribution of commodities according to the relative importance of the surpluses.

With respect to the increase in funds for educational, developmental, and research programs on fishery products, the Department of Agriculture—through the Agricultural Research Service—conducts research in nutrition and in the utilization of agricultural products, including fish, as food, and also maintains educational service to homes and institutions regarding all food products. The Department, through its plentiful foods program, works with the food trade to promote the distribution and consumption of those foods, including fish, which are in surplus supply. It would not seem advisable to expand such services in another department not primarily concerned with the marketing and utilization of food products.

In view of the above, this Department recommends against passage of these bills.

The Bureau of the Budget advises that there is no objection to the submission of these reports.

Sincerely yours,

TRUE D. MORSE, *Under Secretary.*

The first witness we will call will be Mr. Bates, of Massachusetts.

STATEMENT OF HON. WILLIAM H. BATES, OF MASSACHUSETTS

Mr. BATES. Mr. Chairman and members of the Subcommittee on Merchant Marine and Fisheries: I appreciate the opportunity you have afforded me in appearing before your subcommittee in behalf of H. R. 7641, a bill which I introduced to further encourage the distribution of fishery products and for other purposes.

Identical bills have been filed in the House of Representatives by the gentleman from Massachusetts, Mr. O'Neill and the gentleman from Michigan, Mr. Knox. In the Senate, similar legislation has been filed by Senators Saltonstall and Kennedy. Because of the importance of this proposed legislation, and in order to expedite action, a hearing was held on the Senate side yesterday, and we are grateful, Mr. Chairman, for the opportunity you afford the witnesses to present their case while in Washington at this time.

Specifically, the bill now under consideration, would require the Secretary of Department of Agriculture to transfer to the Secretary of the Interior each fiscal year, beginning with the fiscal year commencing July 1, 1954, from moneys made available to carry out the provisions of section 32 of the act of August 24, 1935, an amount equal to 30 per centum of the gross receipts from duties collected under the customs laws on fishery products.

The moneys so transferred would be maintained in a separate fund and used by the Secretary of the Interior to promote the free flow of domestically produced fishery products in commerce by conducting a fishery educational service and fishery technological, biological and related research programs, and to develop and increase markets for fishery products of domestic origin.

ESSENCE OF BILL

The essence of this bill is not new. In 1939, a more encompassing measure in this regard became law. The purpose of this proposed legislation is to bring the 1939 act up to date and to make it more effective. Even at this early hour, more than 30 Senators and many more Members of the House have pledged their support of this action.

With your permission, Mr. Chairman, may I explain that the 1939 act authorizes the Secretary of Agriculture to use not more than $1.5 million per year of section 32 funds to purchase and divert surplus fishery products for distribution through relief channels. It also permits the Secretary to transfer to the Secretary of the Interior $75,000 to conduct a fishery educational service and $100,000 to develop and increase markets for fishery products of domestic origin.

I am given to understand that the authority to purchase surplus fishery products has rarely been used, although in recent years, the funds for a fishery educational service and for market development have been regularly transferred.

It is interesting to note that since the enactment of the act of 1939, gross receipts from duties on fishery products have increased enormously. The total amount in 1940 was $4,772,428; and in 1952, it had risen to $11,982,000, representing an increase of more than 250 percent.

It is clear that during a period when the domestic fishing industry has been increasingly in need of assistance in meeting foreign competition, this same industry has been making very large and increasing indirect contributions for purposes not related to this need. I do believe, Mr. Chairman and members of this committee, that the bill now before you, would correct this unfair situation.

NEED OF LEGISLATION

The urgent need of this measure is self-evident.

As you well know, in recent years, the fishing industry throughout the United States has become confronted with increasingly difficult problems. Nearby fishing grounds have become depleted and as a result, the fisherman finds it necessary to travel four and five hundred miles before he can locate fish. A thousand-mile journey is not unusual as a result of the constantly changing habits of fish and their habitats. The reasons for these changes are to a large degree unknown.

Fishing techniques are constantly changing and unless there is proper guidance and practical application of expert advice, the fishermen face overwhelming handicaps in a market with a strong international competition.

Declining profits in some areas and sustained losses in others have made it impossible to secure capital to find the answer to problems which threaten the very existence of the industry.

IMPORT FIGURES

Imports have soared at a terrific pace in the past quarter century.

As you can see from the charts, in 1939, imports represented only 9 percent of the domestic production of groundfish fillets.

In 1952, imports represented 81 percent.

In 1940, imports amounted to only 9 million pounds; in 1952, a total of 107 million pounds.

In all these years, while imports increased 1,200 percent, our own production increased only 8 percent. Government aid, natural advantages and lower standards of labor in foreign countries have mitigated against the domestic industry.

In 1941, imports represented only 7 percent of domestic consumption and in 1952, they represented 45 percent.

While our production of fish has increased only 8 percent since 13 years, the cold-storage holdings have increased 200 percent.

Because of low labor and other costs and other factors, the average price for ocean perch at St. John's, is only 2 cents while in Gloucester, it was at the same time 3.93 per pound.

With your permission I would like to show some charts I have here which indicate the results of imports since 1939.

From this chart you can see that back in 1939 the imports as percentage of domestic production have increased from only 9 percent up to 81 percent in 1952. I don't have the latest figures in 1953 but it was estimated it amounted to about that much.

Mr. NORBLAD. That is total nationwide production and not just east coast?

Mr. BATES. Total nationwide for groundfish fillets.

This chart here indicates relation of imports to domestic production.

It is interesting to note here, in millions of pounds in 1940, only 9 million pounds came into this country.

In 1952, 107 million pounds came in.

During that period, starting in 1941, you can see that the production of domestic fish remained constant. It increased only from 122 million pounds in 1941 to only 132 million pounds in 1952.

Imports have increased about 1,200 percent since 1940, whereas the increase in domestic production has been only about 8 percent.

Mr. Chairman, this chart indicates imports as percent of domestic consumption.

Back in 1941 imports represented only about 7 percent of domestic consumption.

In 1952 it represented 45 percent of domestic consumption.

This chart indicates United States cold-storage holdings. It is interesting to note that even though our domestic production increased only 8 percent, you can see how our cold-storage holdings in the country increased immeasurably.

For instance, for groundfish fillets, in 1948, there were only 25 million pounds on January 1 in cold-storage holdings.

On January 1, 1953, there were 54 million.

Any increase, Mr. Chairman, which the local and domestic fishing industry enjoyed, was to a large degree taken up in inventory.

To give you another indication of the difficulties we are facing, I think it is well to note on this chart average prices of the vessel, of the fish coming from the vessel, of ocean perch.

For instance, in June of 1953 it was 3.93 cents for fish in Gloucester, whereas in St. John's, Newfoundland, it was only 2 cents.

There are many reasons for that which I and other members will go into later on, Mr. Chairman.

WHAT MEASURE CAN DO

The importance of the fishing industry to every man, woman, and child in this Nation is very apparent. In peace and war times, it is invaluable.

Despite outside pressure and uncertainties of the moment, I am confident that the industry with proper guidance in the field of technological development, will make notable advances and contributions in the food market of our Nation.

New ideas, new confidence, and new fields will bring new investments and growth. The fishing industry, while old, is still young in technological development. The men who form its organization and operation have faced and overcome many obstacles in the past, and they are confident of the future. They merely seek a guiding hand in the very specialized fields of techniques and science.

In discussing the problems of the industry with men who have served it over the years, I find that there is great need for exploring the reasons for fluctuations in the supply of fish, and the answer is to be found through the field of biological and hydrographic research.

Emphasis is placed on the need for research of conditions related to ocean currents, water temperature changes, availability of fish food and other changing and shifting conditions.

Experts also stress the need and importance of undertaking chemical tests for freshness of chilled and frozen fish and shellfish and thus make it possible to provide means for control of quality, and also to prevent spoilage. The accumulation and distribution of more data would make possible a greater utilization of our salt-water and fresh-water fishery resources.

Educational projects would assist in new uses for underdeveloped and less popular species. All of these programs would pave the way

to a busy and prosperous industry, add to employment, stabilize prices for the fishermen, processors, marketers, and consumers of domestically produced fishery products. I could cite many other examples, gentlemen, of projects which the proposed bill would make possible.

There should be no concern in agricultural areas that this bill will limit section 32 funds for their purposes. Under the Agricultural Act of 1949, the Department of Agriculture cannot accumulate funds in excess of $300 million. Last year, it was necessary to return $27 million to the Treasury which represents about 8 times the amount that will be diverted by this bill.

It has also been said by those vitally concerned with the general diversion of section 32 funds that this bill would open up the gate for other industries and that this measure would create a precedent. On this score they need not be concerned because, as has been mentioned heretofore, the act of August 11, 1939, many years ago clearly, definitely, and permanently earmarked section 32 funds for purposes which this bill entails.

For many years, there has been a strong relationship in legislative matters between agriculture and fisheries. In addition to the act of 1939, legislation during the war tied these industries together. Indeed, in some circles, fishermen are, and properly so, called farmers of the sea. The forementioned thoughts will be backed this morning by experts from the industry.

This is a good bill. It is a fair bill. It does not set a precedent. It is a measure that is vital to the continued existence of the fishing industry and therefore vital to the Nation. I ask that you give it your most favorable consideration.

Mr. NORBLAD. Any questions from any members of the committee?

Mr. TOLLEFSON. Mr. Bates, under the 1939 law certain funds were earmarked, as I think the figures you cited were 1 million and a half, were they not?

Mr. BATES. One provision was for $75,000 and another for $100,000.

Mr. TOLLEFSON. Then there was another item, I thought you said, was also earmarked?

Mr. BATES. For the purchase of distress merchandise.

Mr. TOLLEFSON. How much was that?

Mr. BATES. One and a half million dollars.

Mr. TOLLEFSON. Adding those three items together it would constitute more than 30 percent of the funds available under the 1939 act. I think you said under the 1939 act, or pursuant to the 1939 act, in 1940 there was $4.7 million of funds paid into the fund?

Mr. BATES. That is correct.

Mr. TOLLEFSON. So that the moneys earmarked for fisheries actually were more than the 30 percent provided for in this bill; is that not true?

Mr. BATES. That is the point I am trying to make. All this bill does here is to bring the same allocation up to date with reference to the total moneys received from customs in 1939.

Mr. TOLLEFSON. I recall the people from your area, the New England area, appearing before this committee back in about 1949 and testifying that as a result of imports of groundfish fillets they had as high as 50 percent unemployment in the fishing industry there at that time.

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Mr. BATES. That is right.

Mr. TOLLEFSON. Is my recollection correct?

Mr. BATES. They were going through a very, very distressing period then as they are now.

Mr. TOLLEFSON. Primarily because of the impact of foreign imports?

Mr. BATES. Yes, sir, Mr. Tollefson. The situation today is getting worse and worse. We have to go so far today to get our fish.

In addition people who might ordinarily invest money are skeptical of that because of the increasing number of imports which these charts have indicated.

There doesn't appear to be any hope or future to the industry and people who would assess the future and consider the wisdom of putting money into the fishing industry today are very, very much concerned as to whether or not they will ever get back even the money they invested.

Recently three boats were sold to Canada. Many other boats are leaving our particular area. New boat construction is just negligible.

Mr. TOLLEFSON. Is it not a fact that the fishing industry is perhaps one of the oldest industries in the United States?

Mr. BATES. Perhaps the oldest in the history of the world, along with hunting.

Mr. TOLLEFSON. Now from your testimony the fishing industry, it seems, is a sick industry.

Mr. BATES. A distressed, sick industry; yes, sir.

Mr. TOLLEFSON. That is all I have, Mr. Chairman.

Mr. NORBLAD. Any other questions?

Mr. BONNER. What has the Fish and Wildlife Service been doing all this time? This committee has not had them up here for a long time but it is interesting to know that, and I presume you will have somebody here to tell the committee whether they have been doing anything?

Mr. BATES. Yes, sir; they have been doing something but not enough. Perhaps they have been doing as much as they possibly can with the funds that have been provided. Much of their equipment which they have is obsolete. I know the *Albatross Tree*, the boat they have, is obsolete. We have moved into an entirely new era. In Iceland, England, and other countries throughout the world, the United States, through ERA, and other means, have provided them with sonar, radar, and other technological developments which we do not have.

Mr. BONNER. We gave it to them to do their fishing with and we didn't privide anything for ourselves?

Mr. BATES. Yes, sir. We built freezing plants in Iceland, which those folks have up there today to use in competition with us.

Canada has subsidized its industry to a large degree. That is, as far as shipbuilding is concerned. Wages up there are much lower than they are here, and every time we try to do something down here, whether it is in the area of advertising—several hundred thousand was spent by the domestic industry—although it may increase the consumption of fish in the United States, imports increase at the same time, so it is a rather futile gesture for us to try to spend a lot of money to try to develop more consumption in the United States when the people from overseas take advantage of it, and we gain nothing from it.

During the last session we tried to get together with people from Canada and other importers to see whether we could pool some money which could be used to promote the consumption of fish in this country.

We almost had an agreement and then they backed off, and I can perhaps understand the reason. If they can sit back, watch us in this country spend our money, and then reap the rewards, it is pretty good business on their part.

Mr. NORBLAD. Anything else, Mr. Bonner?

Mr. BATES. We have just entered a new era as far as fishing is concerned. The United States fishing industry is lacking in its deveopment of the industry and particularly compared with some of these other countries which we have been so generous in supporting.

Mr. BONNER. The fish investments you speak of, what was the incentive?

Mr. BATES. What was the reason, sir?

Mr. BONNER. Yes.

Mr. BATES. These people were in business, had been losing money; the prospects for the future were dark and they thought they would get rid of the boats.

Mr. BONNER. They can sell more fish in Canada?

Mr. BATES. What they did was to import the fish here. They will buy the boats in Halifax and fish out of Halifax, St. John's, and then sell those imports in this country. We have to provide some hope for the future, and this is a tremendously important thing to our country.

During the war it was sufficiently important to restrain anybody in this country from selling our boats. Even today on the books it is necessary to get clearance from the Maritime Commission before we can sell a boat to foreigners.

In addition to that, during the war you had the question of food shortages.

In addition we have trained many able-bodied seamen in Gloucester, and in addition to that the United States Navy commandeered many of these boats.

Mr. BONNER. You do not mean to tell this committee that the men you have trained up in Gloucester are any better than the fishing men that have been going into service in Carolina and Virginia; do you?

Mr. BATES. I don't think that was the point I was trying to make. I was trying to say fishermen in general make a tremendous contribution——

Mr. BONNER. They both made a great contribution.

Mr. BATES. And even Oregon.

Mr. NORBLAD. Thank you, Mr. Bates.

As a matter of fact, I will take in the States of any Member that will vote for this bill.

Mr. TOLLEFSON. I was interested in your comment about the help we gave the foreign nations with respect to their fisheries.

Is it not a fact during the war we gave over $20 million worth of fishery vessels to Russia?

Mr. BATES. I don't know what the figure is. I know many of our fish boats went overseas and only within the last year 6 or 10, or some such number, were just returned from Germany.

Mr. TOLLEFSON. We actually did furnish to Russia over $20 million worth of fishing and reconverted vessels?

Mr. BATES. I am sure the gentleman knows the facts in the case.

Mr. NORBLAD. Anything further?

Mr. ALLEN. In 1949, after the hearings, I went up to Boston, and from there on north and I talked to many of the people in the industry.

As I remember it, at that time the Canadian Government was offering incentives even to American capital and management to leave New England States and go up into Canada. I think some of them had already gone there. Is that still going on?

Mr. BATES. I don't think we have lost any in the recent past, but some of our industries do operate in Canada.

Mr. ALLEN. I believe the Government was giving subsidies on boat purchases and good financing terms for new industries to move in there.

Mr. BATES. As I understand it that opportunity is present today.

Mr. ALLEN. In addition to that I seem to remember that fillets were coming in packed and ready for retail sale at the Boston dock at about 14 cents and selling for 22 cents on the market, while our costs were about 14 cents before the fish were even processed.

Mr. BATES. That is right.

Mr. ALLEN. That led to an inquiry as to whether the labor costs were out of line. I think it was revealed that the type of labor used in Canada was accustomed to a lower standard of living than our people, and the people worked on their boats, never left, and took care of them when they were in port and worked them continuously.

The committee was distressed by the boat owners and operators and not by the labor involved, but by American owners. Conditions under which American labor would work were appropriate for American labor. The owners themselves would not wish to have the labor live under poor working conditions or for less pay.

Mr. BATES. Yes, sir.

Mr. ALLEN. They were convinced themselves that the trouble was not with any overpayment of the labor. I presume that is still the attitude up there?

Mr. BATES. I think that is a fair statement. You see, we never have done anything to bring any of our laws up to date.

When the Tariff Act was passed we had an assessment of 2½ cents per pound for fish when the amount that came in was over 15 million pounds or 15 percent of the domestic consumption, whichever was greater.

Up to that amount we had a 1⅛ cents per pound. That was all right with whole fish. Since that time we started with fillet fish so you get four times the amount of value in the same weight. But that adjustment never has been made.

The same thing with this particular bill here. Back in 1939 they recognized the difficulties of the industry and that something had to be done. Down through all these years we never have brought the figures into adjustment with present costs and present revenues with fishery products.

Mr. ALLEN. I think I also picked up the information, either there or in hearings here, that the town of Gloucester, and the people who worked there, were 60 percent directly involved in the fishing industry and another 30 percent were directly involved in supplying the services and supplies of those 60 percent. Only 10 percent were dependent for a livelihood on what might be termed jobs outside the fishing industry.

Does that still prevail?

Mr. BATES. The situation is approximate to what the gentleman indicates. It is a one-industry town, and directly or indirectly about 85 percent of the people depend upon the fishing industry.

Mr. ALLEN. It is a 300-year-old industry and we are dealing with the necessity of that community perhaps having to abandon the field.

Mr. BATES. The people in Portugal and Italy are involved, those who came from those countries to settle in our part of the country.

Persons cannot work in a profession all their lives and change it overnight.

Mr. NORBLAD. I think, Mr. Bates, we also recall that this Government purchased and sent to Portugal a large number of fishing boats. On the west coast we sent a number of fishermen over to teach the Chinese how to catch fish.

STATEMENT OF HON. VICTOR A. KNOX OF MICHIGAN

Mr. KNOX. I appreciate this opportunity to appear here this morning to submit for the record my statement relative to H. R. 7441.

My position has been well established through the introduction of H. R. 7441, and in order not to take up any more of your time and so I may proceed to my committee meeting I would like to submit for the record my statement supporting H. R. 7441.

Mr. NORBLAD. Without objection it will be so received.

Mr. KNOX. Intent of proposed changes of 1939 act which authorizes the Secretary of Agriculture to use not more than $1,500,000 per year to purchase and divert surplus fishery products for distribution through relief channels: The amendments I offer to the 1939 act would require the Secretary of Agriculture to transfer to the Secretary of the Interior every year from the funds made available under the act of August 24, 1935, that portion derived from the duties of fishery products. The Secretary of Agriculture would still retain power to make support purchases of surplus fishery products under section 1 of the 1939 act. Should it ever be deemed desirable to exercise this authority, the Secretary of the Interior would have power under section 2 (d) to transfer funds made available under the proposed bill through the Department of Agriculture for this purpose. The remaining funds would be used by the Secretary of the Interior to conduct a fisheries educational service and fisheries research programs and to develop and increase markets for fishery products of domestic origin.

It further provides that the Secretary of the Interior would cooperate with other agencies of the Federal, State, and local governments with interested private organizations and individuals. Such functions are within the jurisdiction of the Federal Government and are seriously required at the present time.

Among the educational projects beneficial to the industry which a lack of funds precludes at this time is the development of new uses for the underdeveloped and less popular species found both in fresh and salt waters so as to provide year-round employment and stable market prices for the fishermen, processors, marketers, and consumers of domestically produced fishery products. In order to develop and increase markets for fishery products much more data than is now being collected would be helpful in determining the proper utilization

of our fisheries' resources. Receipts and wholesale prices would be collected in eight large consuming cities such as Philadelphia, Baltimore, Cleveland, Detroit, Chicago, St. Louis, and Los Angeles not now covered by the Market News Service. Examples mentioned should serve to make clear that the need is great and adoption of the means of meeting it provided for in the proposed bill would be a long step forward.

Mr. ROBESON. I would like the record to show that Congressman Smith, of the Eighth District of Virginia, was here but had to leave to attend his own committee meeting.

He represents the Eighth District and I represent the First District in Virginia, which includes the Atlantic coastline of Virginia, North Carolina, Maryland, Chesapeake Bay, the James River, and the Potomac.

We are concerned with this problem and we would like to be recorded as urging the approval and passage of this legislation.

Mr. NORBLAD. Thank you.

Mr. Rogers of Florida?

Mr. ROGERS. I appear in support of the legislation. I represent the Sixth Congressional District of Florida where we have a large amount of fishing.

I also appear here along with Mr. Bevus, commissioner of conservation in Florida, and also Miss Schulman, who is assistant attorney general for the State of Florida, and Mr. W. G. Henry, engaged in the fishing industry and one of our outstanding citizens, having been a member of the legislature for some 15 years. He has given freely of his time to the fishing industry.

I will not go into a discussion of the merits of the bill because I am sure, Mr. Chairman, you have that adequately explained. I think Mr. Bates made an excellent statement on that.

I cannot see from the provisions of this bill how there could be any opposition to the provisions of it, and I hope this committee will report it favorably.

Mr. NORBLAD. Mr. Campbell of Florida?

Mr. CAMPBELL. I am in thorough accord, and our entire party delegation I am sure is in accord, and we will all file written statements backing up these bills if you wish.

Mr. Bates made an excellent statement and I would only be repeating to you what he already has said, but I do say that the fishing industry is a big industry in Florida and our entire delegation will support these bills 100 percent.

Mr. NORBLAD. Hon. D. R. Matthews.

Mr. MATTHEWS. I would like to associate myself with the views which have been so ably expressed by my colleagues, Congressman Campbell and Congressman Rogers. I want to thank you very much for permitting me to add my statement.

STATEMENT OF HON. JACK WESTLAND, OF WASHINGTON

Mr. WESTLAND. It is a long jump from the Atlantic Ocean to the Pacific Ocean but our problem is the same, and if you gentlemen will bear with me for a couple of minutes, I would like to read this statement and submit myself for any questions.

(The statement of the Honorable Jack Westland, Member of Congress from the State of Washington, is as follows:)

Mr. Chairman and members of the Committee on Merchant Marine and Fisheries, the coastline of the Second Congressional District of the State of Washington, which I have the honor to represent, is longer than that of any other congressional district in the United States. Located on that stretch of coastline are 14 major fishing ports. Fishermen who put out from those ports make their catches in the waters of Puget Sound, the North Pacific Ocean and the Gulf of Alaska.

The taking of salmon occupies the attention of a majority of these fishermen. However, the halibut fleet is very large and very active and tunafishing and the taking of many species of ground fish provide employment and income for thousands of men.

There are at least 20 fish canneries and fish-processing plants located along the shores of Puget Sound within my district. These plants provide employment for thousands of men and women and furnish an almost unbelievable amount of high protein, tasteful foods for people living all over the United States.

For many years now, the unlimited importation of ground fish fillets from Canada, Iceland, Norway, Denmark, West Germany and other countries has seriously threatened the very existence of the fishery industry of the north Pacific coast. Wages paid in the fishery industry in Canada averaged less than half of those of our own people, while in Iceland the ratio is greater than 4 to 1. The average wages paid over the entire industry in Iceland is about 52 cents per hour. The average paid in the United States is $2.09 an hour.

For the above reasons, a substantial import duty is collected on fish that is imported into the United States. Because of the tremendous increase of these imports, the amount of duty collected has increased also. Not in proportion to the bulk of fish imports, I grant you. The import of ground fish fillets, for instance, has been over 1,000 percent in the last 14 years. Total amount collected as import duties has risen over 250 percent in that period. In 1940, the total amount collected was $4,772,428. By 1952, this had increased to $11,982,000. During these same 12 years, the value of fishery imports increased from $40 million to over $200 million. The domestic industry in the meantime has barely managed to hold the share of the market it had at the beginning of this period by ranging farther and farther afield at greater and greater expense for every pound of fish caught. The ground fish fishing industry in my district has been unable to compete with this tremendous volume of imports and of approximately 250 boats which formerly engaged in this type of fishing, 85 percent were idle during most of last year.

The provisions of the bill which has been introduced by my esteemed colleague, Mr. Bates, of Massachusetts, the merits of which you are considering this morning, are well known to all of you gentlemen. Since foreign imports from cheap labor areas are the chief cause of the distress of the fishermen of the United States, it is only reasonable and fair that import duties collected on these imports should be used to alleviate the resulting conditions which face our friends and neighbors. It is agreed by those who have made an intensive and complete study of this situa- that a tremendous boost in research and development activities in behalf of this industry is the only thing that will save it from ruination. Inasmuch as over a half-million people directly or indirectly gain their employment and their livelihood from the fishery industry which produces one of the finest protein foods available and which carry a total value of approximately $325 million a year, it behooves those of us here to give every consideration to necessary steps for preserving that industry.

Under previous laws passed in 1935 and 1939, the Department of Agriculture will receive this year and in subsequent years some 12 or 13 million dollars derived from import duties levied on the imports of fish caught in foreign waters by foreign fishermen and processed in foreign canneries, much of it caught in boats built in this country and sent abroad. The legislation under consideration will, if passed, require the Secretary of Agriculture to turn over to the Secretary of Interior 30 percent of the amount so received. This money will be used by the Secretary of the Interior to the extent feasible for research, education, and development of markets for the fishery industry.

Many projects along this line for the benefit of this great industry are presently held in abeyance because of lack of funds to pursue them. Fishing, basically, is a small-business operation. There are no great corporations engaged in this industry with available funds to carry on the research projects that are so essential to its survival.

If by judicious use of the funds which would become available under this measure, the Department of the Interior could stabilize the fishing industry of the United States so that employment would be on a more nearly year around basis rather than strictly seasonal as at present, it would mean that the American fisherman could more equally compete with our friends in Canada and Iceland for the American market. There are dozens of other examples of highly desirable and feasible projects presently on the drafting board that could be pursued if these funds are made available to the great benefit of the American people in general, the food supply, and the economy of the country.

Allocation of these funds to this purpose will not deprive the Department of Agriculture of necessary funds for research, education, and development of markets in other fields. During the last 6 years, under section 32 of the act of August 24, 1935, over $900 million has been made available to the Department of Agriculture for this purpose. The Agricultural Act of 1949 provides for an accumulation of section 32 funds by the Department of Agriculture up to a total of $300 million. Any excess over this amount must be turned back by the Department to the Treasury. In fiscal 1954, $27 million has been turned back, 7 or 8 times the total which would be made available to the Department of the Interior under this proposed legislation, to meet the research and development needs of the fishing industry.

Because of all these reasons and dozens of others which would be given if time allowed, I respectfully and urgently beseech the early approval by this committee of this proposed legislation.

JACK WESTLAND.

Mr. TOLLEFSON. I want to commend Mr. Westland from the great State of Washington for his very fine statement.

Mr. O'NEILL. On page 3 of your statement, you state:

It would mean the American fishermen can more equally compete with our friends from Canada and Iceland for the American market.

Have you appeared at the Tariff Commission?

Mr. WESTLAND. No, sir; I have not.

We know, Mr. O'Neill, that where funds have been made available in small amounts, 130 or 140 thousand dollars for this Canadian and American salmon project which has worked on the Frazer River, that those funds have been used to great advantage and have resulted in a great increase in the salmon catch right out in my district.

The funds have been used real well, and it is our sincere belief that if these funds are made available to the Department of the Interior, Wildlife and Fisheries, as youm entioned earlier, they will go ahead and conduct this research and provide a greater yield.

Mr. O'NEILL. I am in agreement with you, but what I asked was this: We have pending before the Tariff Commission the whole case of the fishing industry. Have you had an opportunity to appear before the Tariff Commission in favor of the industry stand, the fishing-industry stand?

Mr. WESTLAND. I have not personally appeared before them, Mr. O'Neill.

Mr. O'NEILL. I say this not only to you but to all of the members appearing for this bill. If they give those of us who appeared there a hand, I think perhaps we can accomplish something for the fishing industry.

Mr. WESTLAND. I will be glad to do so.

Mr. NORBLAD. Those tariff hearings were held last October when I was on the west coast and you were, too.

Mr. WESTLAND. Are those the hearings you refer to, Mr. O'Neill?

Mr. O'NEILL. The bill was pending not long ago but I am sure the decision has not come down yet.

Mr. WESTLAND. A couple of companies from Seattle filed briefs on that.

Mr. NORBLAD. Thank you, Mr. Westland.

Mr. Lane, author of H. R. 4303.

STATEMENT OF HON. THOMAS J. LANE, MEMBER OF CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. LANE. First may I extend my thanks to you, Mr. Chairman and members of the committee, for affording me this opportunity to appear before your committee this morning with reference to the principle involved in these bills. I am aware of the fact that the call bell has now rung for the session and there are many witnesses here to be heard. For that reason, Mr. Chairman and members of the committee, my statement will be brief.

FISHING INDUSTRY RUDDERLESS AND DRIFTING DANGEROUSLY

Men who look ahead say that we may, eventually, have to depend upon the oceans as the major source of our food supply.

Men who live in the present comparing that prediction with the run-down condition of the commercial fishing industry of the United States today, wonder how we can be so improvident.

Men and ships are idle.

Investments are being lost.

Insurance rates are confiscatory.

Markets are declining under the pressure of imports from other nations.

The whole industry is in the doldrums.

And the economy of New England is being dealt a second major blow.

We have research, conservation, and price supports to help the farmers on a large scale, but only a penny-pinching attitude by the Federal Government toward the threadbare textile industry, the floundering fishing industry, and other segments of our national economy.

The seaports of Newburyport and Gloucester, and the self-reliant people that they bred, were once famous around the world, but now the ships and nets are idle, and the crews are trying to find part-time jobs on land.

There are several reasons for the hard times that have hit this primary industry, not the least of which is the indifference of the Federal Government toward this essential occupation.

When the industry petitioned the Tariff Commission for relief, its plea for support against the invasion of foreign boatloads of fish was rejected.

PRICES NOSE-DIVED

As a result, the American fishing industry is threatened with extinction because it cannot cope with prices that are below costs and with vanishing markets.

In the interest of national security we cannot afford to stand on the sidelines and watch this industry disappear.

We ask only a minimum of help to avert a major calamity.

Under the terms of H. R. 4303, only $3 million shall be diverted from funds under the direction of the Secretary of Agriculture to move the surplus of fish products by encouraging consumption through relief channels—in other words—making this food that is so rich in energy available to those who are in need.

A small part of these funds shall be set aside to promote educational, technological and research programs that will create greater demand and diversified markets for fishing products of domestic origin.

I want to call this committee's attention to the fact that some of our essential fishing ports are one-industry communities where shore establishments rise or fall like the tide, dependent upon the success or failure of the fishing fleets and the men who man them.

As with one-industry, textile cities, or mining communities, the Federal Government cannot forever shrug off responsibility.

It has a clear-cut duty to answer the S O S—and come to their assistance before they are lost—with just a little help.

May I say, Mr. Chairman, that since I filed this bill, and I have been informed here this morning by representatives of the fishing industry that they prefer the bill filed by Congressman Bates, for that reason I wish to forego any part in the authorship of the bill I filed and to support the Bates bill because I think the Bates bill covers the matter more effectively, very well, and perhaps will grant more relief in the long run.

Thank you, Mr. Chairman.

Mr. NORBLAD. Any questions?

Mr. TOLLEFSON. Just one comment, Mr. Lane. You state in your opinion our Government has neglected the welfare of the fishing industry?

Mr. LANE. I know that you have lived with this subject matter for a long period of time. I have seen him at the various conferences on the fact that this industry is being hit hard by the imports from Canada and other places, and I join with him in his feelings with reference to this matter.

Mr. TOLLEFSON. I wanted to make it clear we are not eliminating Congress itself from that statement. Congress itself in my estimation has neglected the welfare of the fishing industry.

Mr. LANE. Very true. Thank you very much.

Mr. ALLEN. It was my recollection that the 79th Congress, in Senate Document 50 or 51, gave a number of statistics on fisheries, and among other things showed that the subsidy per ton of food produced in the agricultural industry was $7.09, as I remember it. Subsidy per ton of fish produced was about 83 cents.

Do you know if those figures are still good?

Mr. LANE. I cannot help the gentleman on that. I am not conversant sufficiently with those facts.

Mr. NORBLAD. Thank you, Mr. Lane.

Hon. William M. Colmer, of Mississippi.

Mr. COLMER. Mr. Chairman and members of the committee, I merely want to appear here this morning in behalf of this legislation incorporated in the bill by our colleague Mr. Bates and several others of our colleagues.

I have no prepared starement, gentlemen. As a matter of fact, I am long since past due on my own committee, and I must rush along.

I merely wanted to make an appearance here, as I said, in behalf of this type of legislation. I represent a district which borders on the Gulf of Mexico. My attention was called to this proposed legislation by the Appropriations Committee when I sought this year to get some additional funds for research for the very important shrimp industry down in the Gulf of Mexico. I was told this legislation was pending and this perhaps was the best way of getting it.

I hope that the members of that committee will be at least consistent when this legislation reaches the floor and give us support.

I am thoroughly in accord, Mr. Chairman and members of the committee, with the objectives sought in this legislation, and I merely wanted to come here to offer my humble efforts as just an ordinary Member of this Congress in behalf of this type of legislation.

I think you very much, Mr. Chairman.

Mr. NORBLAD. Mr. Tollefson?

Mr. TOLLEFSON. Mr. Hand, of New Jersey, was here a few minutes ago. He had to go to his own committee meeting. He asked me to say to you that he would like permission to present for the record his statement in support of this legislation.

He used to be a member of this committee for some 8 years, and while he was on the committee he was 1 of the very staunch friends of the fishing industry.

I ask he may be permitted to file his statements.

Mr. NORBLAD. Yes; that will be permitted.

(The statement is as follows:)

STATEMENT OF HON. T. MILLET HAND, MEMBER OF CONGRESS FROM NEW JERSEY

Mr. Chairman and gentlemen of the committee, I am indebted to you for your invitation to appear this morning because I am very much interested in the study now being made of H. R. 5829 and similar bills by the committee.

Before I make my brief statement, let me thank you for inviting me to resume my old seat at the committee table. I feel very much at home here, having served on this committee with interest and pleasure for nearly 7 years.

The bill now under discussion would provide that from funds available to the Secretary of Agriculture resulting from import duties (the so-called sec. 32 funds) there be transferred $1 million a year to the Secretary of the Interior; three-quarters of that fund to be used by him to promote the free flow of domestic fish products by conducting an educational service and research programs, and one-quarter of the fund to be used by the Secretary to develop and increase markets for fishery products of domestic origin.

Mr. Chairman, historically very large funds have been devoted to similar purposes in agriculture and with amazingly good results. Particularly as a result of this, our farmers are way out in front of all the rest of the world in their productivity, as a result of which the farmers have prospered and the United States is in the fortunate position of having a surplus of food. It has made a great contribution to the health and welfare and standard of living of the American people and the program, of course, should and will be continued.

However, our fishery sources have been greatly neglected. The money spent on related programs in fishing have been trifling and, as a result, our commercial fish production has not greatly prospered in recent years and, moreover, the great recreation of sport fishing has deteriorated. Our fish business has likewise been adversely affected by unwise policies relating to the importation of foreign catches. I have seen these effects with my own eyes because I come from a great fishing area as does the author of the bill, the gentleman from Massachusetts, Mr. Bates, in whose district lies the great fishing port of Gloucester.

Mr. Chairman, it seems to me there should be little objection to spending a relatively small sum at least to benefit our fisheries, not only to help the fishing industry as well as sport fishing, but also to increase the supply and use of a wholesome and delicious food. This, I take it, is the purpose of the bill, and I am all for it.

If I may, I would like to make just one suggestion. I am inclined to think that the words "fishery products" include shellfish, such as oysters, clams, crabs, and so forth. I would feel more comfortable, however, if they were spelled out in the bill because the great oyster industry in my area, on the shore, and particularly in the Delaware Bay, needs help and could certainly use the great benefits provided by this bill.

I hope the committee will look with favor upon the legislation and, if adopted by the committee, will use every effort to push it through to a successful conclusion.

Again my thanks for inviting me to appear before you this morning.

Mr. NORBLAD. It is now about 2 minutes to 11. I anticipate, if things go as usual, we will have to leave in 5 or 10 minutes from now.

I have a list of approximately 18 witnesses from Massachusetts, Texas, New York, and Florida here, and from all over the country. I assume they are in the room.

You gentlemen who want to testify, will you hold up your hands? That is, if we hold a hearing tomorrow morning.

(Discussion held off the record.)

Mr. NORBLAD. Mr. Bundy, please.

Mr. Bundy, I am not giving you priority over anybody else except for the fact that I know you are president of the National Fisheries Institute and, I assume, represent the industry as a whole.

Mr. FREDERICK BUNDY. Thank you. I shall try to be as brief as possible. I am president of the National Fisheries Institute and also president of Gordon Pugh Fisheries of Gloucester, and I happen to be a member of the legislative committee of the National Canners which, as you know, is interested in other kinds of food than fish.

NFI, as we call it, has about 600 members, producers, processors, distributors, and also is composed of local and regional associations with other members.

It is truly national in scope.

Our industry is composed of small units. They are not able to spend large sums for research such as the steel companies, motor companies, and even such groups as the national meat industry.

We have had a depression of our own during the past few years, partly due to foreign competition and the Government's policy of no increased tariffs because of the goodwill policy of the State Department.

To offset that we need all the help we can get scientifically to improve the efficiency and lower cost.

There is undoubtedly ample need. Projects will be suggested by others of a scientific turn of mind. We need additional funds and not funds in this manner to replace those now being appropriated.

Incidentally, I understand this morning that the House Appropriations Committee has just brought in a report cutting the fish research appropriations of the Fish and Wildlife $527,000, 13 percent below current appropriations and less than recommended by President Eisenhower. This is certainly disheartening news to the industry, and we hope you gentlemen will do something to prevent this jolt which instead of getting something to help us is taking something away.

I am delighted that this bill, the Bates bill, is sponsored by our own Gloucester representative. I want to put in Fisheries Institute very strongly behind this type of legislation. I have never seen the industry more united behind legislation as they are behind this.

The real point is that it is fair. We are only asking that fisheries be treated with its percentage just as agriculture is treated.

An example I can think of is that if we treat agriculture better than fisheries it would be like a father with two children and he educates the older one, puts him through graduate school, and lets the younger one fend for himself.

Mr. NORBLAD. Any questions, members of the committee?

Mr. BONNER. The statement has been raised that this committee hasn't done much for the fisheries.

During the time that the late Judge Bland was chairman of this committee I distinctly remember various bills which were passed here authorizing the study for the purpose of increasing the catch, and so forth, and the bills were passed in the House. They carried a certain authorization of money.

What to your knowledge has the Fish and Wildlife done? They were directed to carry out these various things we passed. What have they done to carry out legislation which has been formally passed by this committee for this purpose?

Mr. BUNDY. In my experience this committee always has given a very friendly reception to the industry.

Mr. BONNER. That is what I thought.

Mr. BUNDY. Judge Bland was a very good friend of the industry. But the trouble is that things cost a lot more than they used to cost.

Fish and Wildlife certainly has to pay more to each individual in it and they can do only half as much with the same amount of money as it could have been done with this money 10 years ago.

I think they are doing all they possibly can. They have started research programs and they have had to abandon them. They always have things in mind they would do if they had money to do it.

Mr. BONNER. Certainly it is not the fault of this committee.

Mr. BUNDY. It is not, sir. You have done all you could.

Mr. BONNER. I notice in the reports on these bills that every agency of the Government in 1953 and 1954 reported unfavorably to these various bills. Here this morning you bring in information that the Appropriations Committee has cut 13 percent below last year's budget for the purposes this bill intends to aid and carry out.

Mr. BUNDY. We look with horror on anything of that sort and we hope this committee will be of great help in getting this amount reinstated.

Mr. BONNER. If it has been recommended to be cut 13 percent, and if we pass this legislation, what assurance do we have that anything will be carried out?

Mr. BUNDY. As I understand it, the cut is from the Bureau of the Budget or from a congressional committee and not a cut recommended by Fish and Wildlife.

Mr. BONNER. I didn't say it was, but Fish and Wildlife can't very well operate unless they have a few dollars in their pockets.

Mr. BUNDY. I will check that.

Mr. BONNER. I am interested in legislation and would like to see more done.

Mr. TOLLEFSON. Will you yield at this point?

Mr. BONNER. Yes.

Mr. TOLLEFSON. I gather that the Department of the Interior has no objection to the bill.

Mr. BONNER. I have just gone through the report.

Mr. TOLLEFSON. On page 3, the second paragraph of the letter from the Department of the Interior:

> I strongly favor the objectives of the program recommended by the proposed legislation.

They have one Department in favor of it.

Mr. BONNER. On page 3 it is a letter addressed to Mr. Weichel dated April 1, 1954. Is that correct?

Mr. TOLLEFSON. Yes.

Mr. BONNER. Then it continues on page 4 and on page 5.

Mr. TOLLEFSON. They state it has not been cleared by Budget, but the Department itself is not opposed to the bill.

I hope I read it correctly.

Mr. BONNER. That is correct.

Mr. NORBLAD. I understand that to be correct. I talked to the Director a minute or two before the Committee meeting and he will be here to testify tomorrow.

Mr. BONNER. It is well to bring this out and let the visiting people interested in this legislation know the real picture which exists.

With all the interest in it demonstrated by Members of Congress and this committee I hope we can overcome the problems set forth in this report.

Mr. ALLEN. In the last 7 or 8 years the formation of interstate organizations under compacts between the States has resulted in commissions on the Atlantic, on the Gulf and on the Pacific coasts to deal with fishery products.

Have you found that these commissions and the correlation of the activities of the States concerned have brought about a workable arrangement and possibly relieved Congress from consideration of some of these problems?

Mr. BUNDY. I do not consider I am qualified to give you a good answer to that question. I will refer that to Mr. Haydecker who is in the Atlantic States Commission.

Mr. ALLEN. Thank you very much.

Mr. NORBLAD. I would like to state that if any of you gentlemen who are here from out of the city and are leaving and unable to be here tomorrow, if you have statements, if you would stand up now, please.

STATEMENT OF J. RICHARDS NELSON, PRESIDENT OF THE OYSTER GROWERS AND DEALERS ASSOCIATION OF NORTH AMERICA

Mr. NELSON. J. Richards Nelson, Oyster Growers Association. I have filed a written statement with the clerk.

Mr. NORBLAD. Where are you from?

Mr. NELSON. Head office is Annapolis, Md. I am personally from New Haven, Conn.

(The statement is as follows:)

STATEMENT BY J. RICHARDS NELSON, PRESIDENT OF THE OYSTER GROWERS AND DEALERS ASSOCIATION OF NORTH AMERICA

Oysters are produced in 19 States in our country. They were an important source of food for the early settlers and they abounded in the brackish water bays along the entire east, west, and gulf coasts. The harvesting of them took place at such a rapid rate that even by the beginning of the 20th century, depletion of many of the natural beds had already taken place.

Oyster farming came into existence as natural beds became depleted. Oysters spawn during warm weather starting in the early spring in the gulf area and later farther up the coast with a normal date of mid-July in New England. The sexes are separate and the chance mingling of eggs and sperm in the water results in the production of microscopic larvae that spend 2 or 3 weeks as tiny swimming animals. At the end of that period they attach themselves to some firm object and are then fixed for life, losing their powers of locomotion.

The oyster farmer takes advantage of this and plants large quantities of cultch, usually empty shells, at the right period of the year so that the larvae can have a clean surface to attach to. If setting is successful, the shells with the tiny oysters attached are usually transplated to deeper, saltier water within a few months. It takes from 3 to 5 years to mature a crop for market and during that period the oyster farmer often transplants his crops 2 or 3 times.

The annual production of oyster meat is about 70 million pounds. It is a high protein food, rich in vitamins, and trace elements from the sea. It is a valuable source of food at all times and particularly during periods of national emergency when protein foods are scarce. It is a crop that feeds on the tiny plant forms of the sea, which in turn gained their nutriment from the minerals that have leached from the land and would otherwise be lost to man forever.

Oystermen are a hardy lot, accustomed to the uncertainties of farming underwater. They never have asked the Government for a subsidy and do not ask it now. Underwater farming, like land farming, has its enemies. Some of these are known and can be successfully controlled. Others are not well known and it is only through research that methods of control can be effective.

The New England States, including New York, in the past 4 years have suffered a decline in oyster production in the neighborhood of 7 million pounds annually. Some of this is the result of a disastrous storm in November 1950, which destroyed a large percentage of the then-existing seed crops. Research is badly needed to determine how to replenish the seedbeds not only of New England but of all the other oyster-producing States whose production is also declining.

The United States Fish and Wildlife Service has marine laboratories in operation well-equipped and excellently directed. Lack of adequate operating funds, however, has made it impossible for the Service to assign scientists to research projects vitally needed by both the oyster and clam industries.

Our markets have been invaded by foreign frozen shellfish and this fact combined with the lack of research on vital problems of domestic production has made it increasingly difficult for our industry to survive.

This bill would provide for needed research to stop the decline and strengthen an industry that produces a valuable protein food and spends more than half of each dollar of income for labor, giving gainful employment to many thousands of workers.

Mr. LENAHAN. John Lenahan, general manager of the Seafood Producers Association of New Bedford, Mass. I request that we be permitted to file a written statement in the very near future.

Mr. NORBLAD. In the very near future, yes.

STATEMENT OF WAYNE D. HEYDECKER, SECRETARY-TREASURER OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION

Mr. HEYDECKER. I have filed with the clerk a memorandum with respect to these measures. I would ask permission to change the reference. At the time this communication was written it referred solely to H. R. 5829. We now understand Mr. Bates' other bill, H. R. 7641 is identical with the other and we want to join in that other.

(The statement of Mr. Heydecker is as follows:)

ATLANTIC STATES MARINE FISHERIES COMMISSION,
Mount Vernon, N. Y., March 29, 1954.

Re H. R. 5829 by Representative William H. Bates

Hon. WALTER NORBLAD,
Acting Chairman Subcommittee No. 2,
Salt Water Fisheries of the House Committee on
Merchant Marine and Fisheries,
The Capitol, Washington, D. C.

MY DEAR REPRESENTATIVE NORBLAD: This bill in its earlier form was approved by this Commission at its 11th annual meeting in Boston in the fall of 1952. At that time, the Commission voted unanimously to support the Kennedy bill H. R. 6862 (then pending) or any substantially similar measure for the same purpose. During 1953 a referendum vote of the executive committee approved the subsequent measure then pending in the Senate, S. 1731, and recorded such approval.

Copies of the current bill, S. 2802, were distributed recently to all our commissioners, together with four questions relating to types of research activities that might be undertaken should S. 2802 be adopted, and whether we should arrange meetings to discuss such matters. The returns to such related questions are not yet complete, but relying upon the unanimous action of the Commission in 1952 and the corollary action of the executive committee in 1953 and the trend of the replies received to date in 1954, the Chairman of the Commission has directed me, on behalf of the Atlantic States Marine Fisheries Commission, to request that H. R. 5829 be amended to conform to S. 2802.

To conserve the time of your Committee, we shall be brief. Our South Atlantic Section, with the approval of our executive committee, has requested the allocation of $40,000 annually to permit the motor vessel *Deleware* of the United States Fish and Wildlife Service to do much needed technological research in the coastal waters from Cape Hatteras to Key West during winter months when it is normally not operating out of Boston. Our Commission, in the past, has also requested the Fish and Wildlife Service to undertake certain much needed biological and technical research projects in various areas of the Atlantic coast for which no funds are available or for which only meager funds exist. The fishing industry of the New England States has evolved a program which will be presented to you and which includes several special research projects which this Commission has already requested. The Gulf States Marine Fisheries Commission, after much study, has adopted a long-term program for shrimp research. All these requests relate to new projects or to operations inadequately financed and indicate definite needs. This is not the time or place to evaluate such proposals. That should come later.

If funds are made available for biological and technical fisheries research under S. 2802 that fact should not be used to justify cuts in existing appropriations. Up to 1945 annual Federal expenditures, per ton of food produced, averaged 82 cents for fisheries as against $7.04 for farm products. It is doubtful if that ratio has changed materially in the intervening years. Yet, annual production then averaged, per fisherman 47,000 pounds, per farmer 34,500 pounds. (Source: S. Doc. 51, 79th Cong., 1st sess., p. 131.)

It seems particularly fitting that funds derived directly from import duties on competitive foreign fisheries products should cease to be used primarily for the benefit of agriculture but instead should be made available for necessary and long overdue research for the fisheries.

S. 2802 would accomplish this desirable end and should be adopted. Since S. 2802 embraces a broader program than H. R. 5829, we respectfully request that if S. 2802 pass the Senate, it be substituted for H. R. 5829. When this is done, we believe that Federal, interstate and State fishery agencies working in close collaboration with the various segments of the fishing industry are capable of developing a practical program that will merit public and official support.

Respectfully submitted by order of the chairman.

ATLANTIC STATES MARINE FISHERIES COMMISSION,
By WAYNE D. HEYDECKER,
Secretary-Treasurer.

STATEMENT OF FRANCIS W. SARGENT, DIRECTOR OF THE DIVISION OF MARINE FISHERIES, MASSACHUSETTS DEPARTMENT OF NATURAL RESOURCES; MASSACHUSETTS COMMISSIONER FOR THE ATLANTIC STATES MARINE FISHERIES COMMISSION; AND UNITED STATES COMMISSIONER ON THE 10-NATION INTERNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC FISHERIES

Mr. SARGENT. I also appear here as the representative of His Excellency, Christian A. Herter, Governor of the Commonwealth of Massachusetts.

Mr. NORBLAD. An excellent governor and a former colleague of ours.

Mr. SARGENT. I have a statement here I can submit to your committee.

I have in several places referred to S. 2082 which is precisely the same bill as Mr. O'Neill's bill and Mr. Bates' bill.

Mr. NORBLAD. Thank you.

(The statement is as follows:)

STATEMENT OF FRANCIS W. SARGENT, REPRESENTING GOV. CHRISTIAN A. HERTER OF MASSACHUSETTS

I am Francis W. Sargent, director of the Division of Marine Fisheries, Massachusetts Department of Natural Resources; Massachusetts commissioner for the Atlantic States Marine Fisheries Commission; and United States Commissioner on the 10-nation International Commission for the Northwest Atlantic Fisheries.

I am appearing today before your committee as the representative of His Excellency Christian A. Herter, Governor of Massachusetts, and as chairman of Governor Herter's committee to promote the Massachusetts fishing industry, in support of S. 2802, a bill which has been introduced jointly by Senators Saltonstall and Kennedy of Massachusetts, and in support of the companion bills in the House introduced by Congressmen Bates and O'Neill of Massachusetts.

Governor Herter has requested that I emphasize that S. 2802 and its companion bills in the House provide not for an added appropriation, but for a transfer of funds. The fisherman is not seeking price supports—the fisherman is not seeking any subsidy. The fisherman is only asking that 30 percent of the revenue from imported fishery products be allotted, not to the Department of Agriculture as at present, but instead be channeled into the Fish and Wildlife Service of the Department of the Interior where the funds fairly and properly belong Here the revenue from fishery products could be used exclusively for exploring ways and means of harvesting and marketing more and better fishery products for the nutritional benefit of the consuming public.

The fisherman does not propose taking away from the farmer funds which are rightly his. Instead the fisherman insists that 30 percent of the revenue derived from fishery imports (an estimated sum of 3 to 4 million dollars) be placed in the hands of the Federal agency designated to handle fishery matters, but not into the hands of the agency designated to handle agricultural matters as is the present practice. Surely, the bill is fair and just.

Although agricultural far outranks the fisheries of the United States in volume of production, the individual fisherman produces more food than does the individual farmer. Each year the individual fisherman produces 47,000 pounds of fishery products while the individual farmer is understood to be producing but 34,500 pounds of farm products, and yet the Fishery Resources of the United States published by the Department of the Interior reveals that for each ton of food produced by the fisherman there was a Federal expenditure of only 82 cents whereas $7.04 was spent by the Government for an equivalent amount of farm produce!

The economic, technical, and educational importance of the proposed legislation will be handled by other witnesses. I have, therefore, been designated to outline only the biological needs which New England hopes may be met with the passage of S. 2802 and its companion bills.

The United States is a highly mechanized and progressive nation in which the achievements of science have played a vital role in her position of world leadership. Agriculture and the many industries which combine to make up the material wealth of this country have benefited from scientific and technological advances, but only in recent years has the fisherman sought the knowledge of the marine biologist and the oceanographer. As a result fisheries research is a comparatively new and unexplored field.

The New England fishing banks have been extensively harvested for some 300 years and the virgin abundance, as a direct result, has been reduced. More than 20 years devoted to the study of the haddock on George's Bank by fishery biologists of the United States Fish and Wildlife Service has provided the necessary basic information which allows the accurate (within 10 percent) forecasting of haddock catch in this area from one year to the next, provided that the fishing effort remains constant. Similar predictions for other valuable commercial species would go a long way toward solving for the fisherman the everperplexing problem of sustained yield, or, to put it another way, the most profitable rate of fishing. Certain pelagic fishers such as the tuna, the mackerel, and the menhaden are sporadic in their abundance and uncertain as to their seasonal migrations and any assistance rendered the fisherman in the form of definite directions as to where and when to fish would be invaluable. This prediction service has been highly developed in the Norwegian and Danish waters where the fishermen are directed to the best fishing grounds, day by day, on the basis of oceanographic knowledge.

What does the fishery scientist have to know in order to determine population strength and natural fluctuations of abundance so that he may predict what the fisherman is likely to get for his effort in any given year or at any specified locality? There is no simple answer to this complex question, but the more completely the life history and environmental requirements of a particular fish are understood, the more accurate will be the biologist's statements regarding the effects of a variety of fishing methods; also, how quickly the particular species will recover from the effects of intensive harvesting.

Here are but a few of the basic questions concerning any species for which answers must be provided to determine the most profitable rate of fishing. How long does it live? What is its growth rate? How old does it have to be before it begins to spawn? Is it more or less sedentary or does it range over a wide area? What are its food requirements? What is its natural mortality?

A recent chart entitled "State of Knowledge—New England Coast Fisheries" prepared by the Fish and Wildlife Service lists a number of the most valuable food fishes and invertebrates and indicates how much or how little is presently known of the various species. The lack of information concerning such important commercial species as the ocean perch, the cod, the flounders, the whiting, the herring, the swordfish, and the inshore forms including the lobster and the shellfish is astonishing but understandable when one considers the limited research that has been possible over the years.

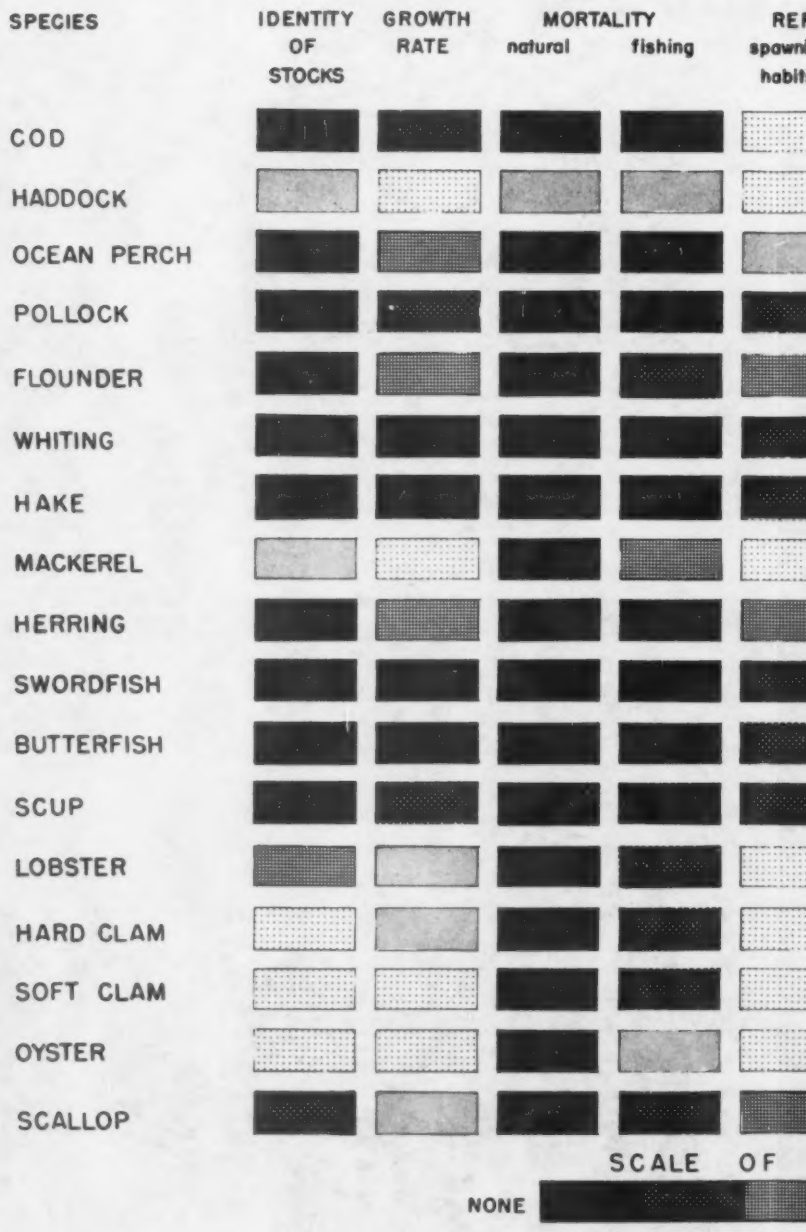
To return to the question of George's Bank haddock research, on the other hand, may I point out that as a result of intensive research on this particular species an international regulation was adopted this year which now requires larger mesh openings for the trawl nets so that 15 million baby haddock, formerly destroyed each year, might escape destruction. Haddock grow very rapidly on George's Bank so that by being spared for only one additional year of growth these 15 million unmarketable baby fish could provide an additional 10,000-ton harvest of marketable haddock.

Not only is it desirable, indeed necessary, to learn more about the various fish, shellfish, and crustacea which form the backbone of the fishing industry as it exists today but also the discovery and utilization of new species is becoming every more urgent as certain old standbys appear to be showing the effects of intensive exploitation. In this connection deep-sea explorations may bring to light entire populations which could well be utilized.

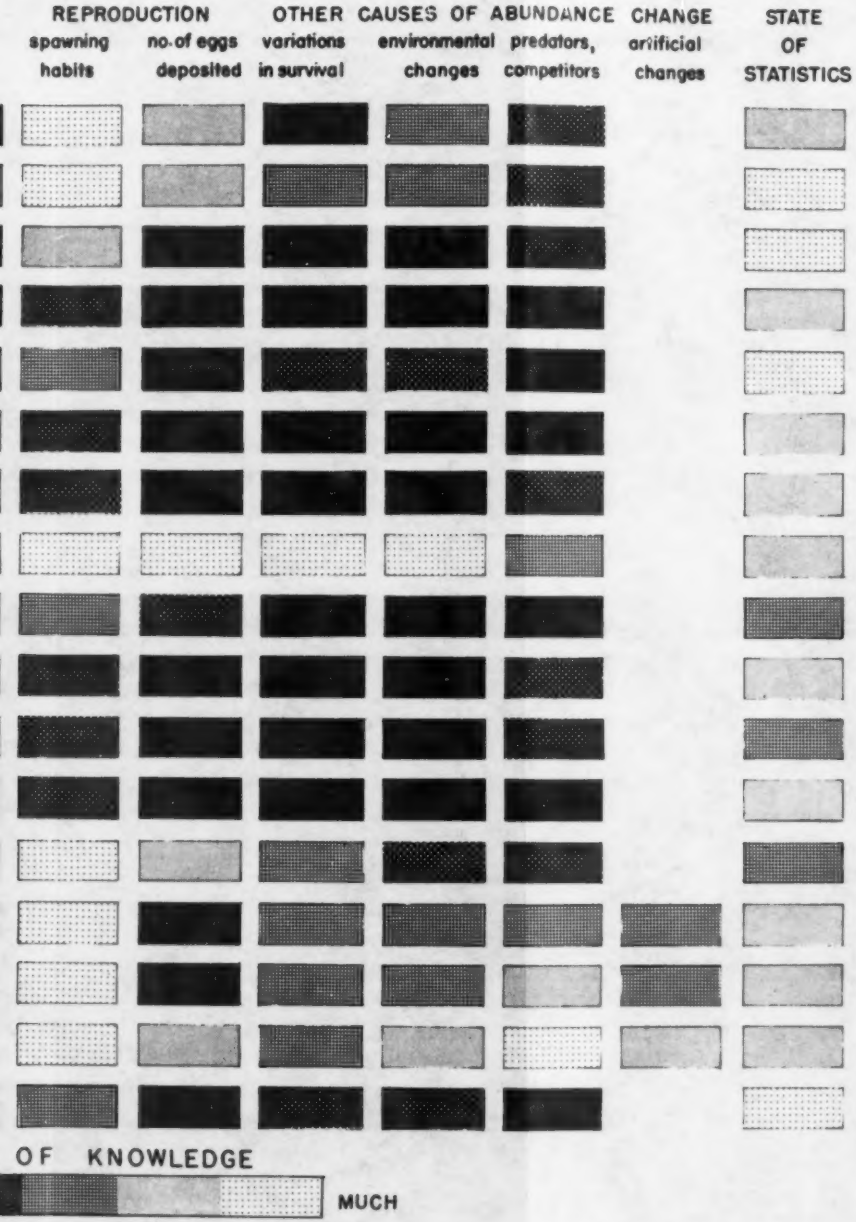
A recent voyage to the edge of the Continental Shelf off our New England shores disclosed the existence of large ocean perch, lobsters, and a species of giant crabs which could provide a profitable fishery. An example of a species which advanced from a very minor position in the 1920 s to one of major importance in little more than a decade is the redfish or ocean perch which is now the mainstay of the historic fishing port of Gloucester, Mass.

To be able to determine the most profitable rate of harvesting for the known species of fish and shellfish and to discover new species falls to the fishery scientist who requires funds and equipment with which to conduct his work.

STATE OF KNOWLEDGE – NE



NEW ENGLAND COAST FISHES



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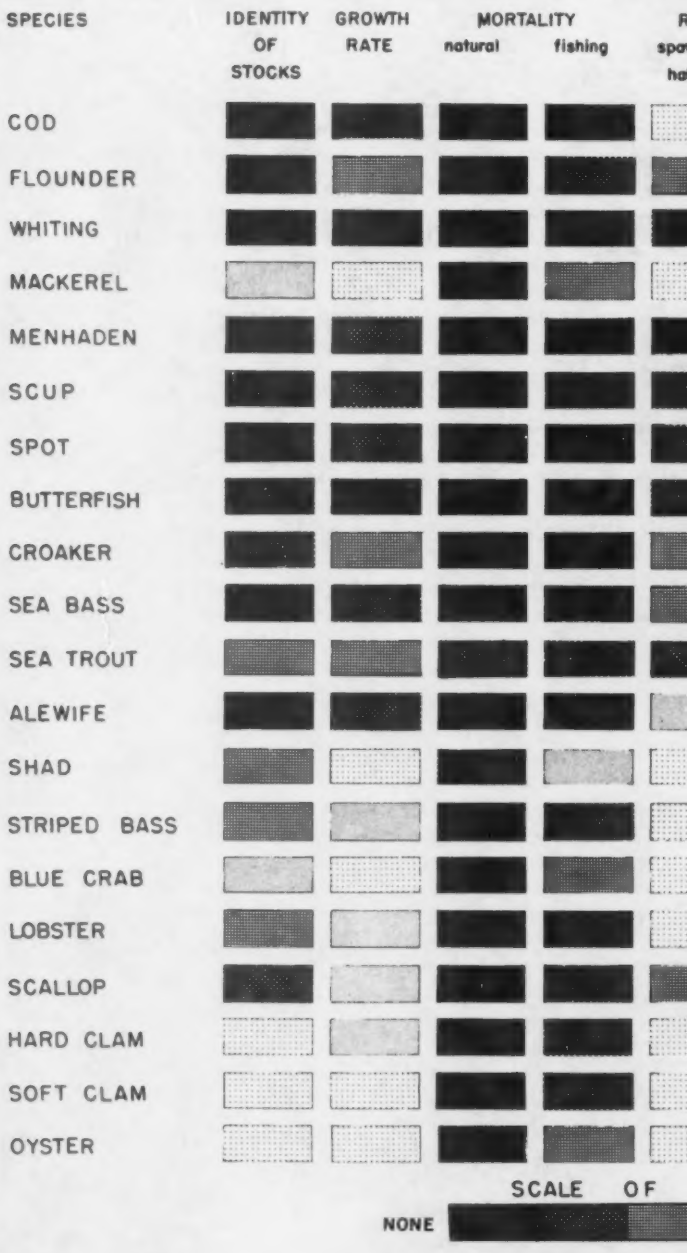
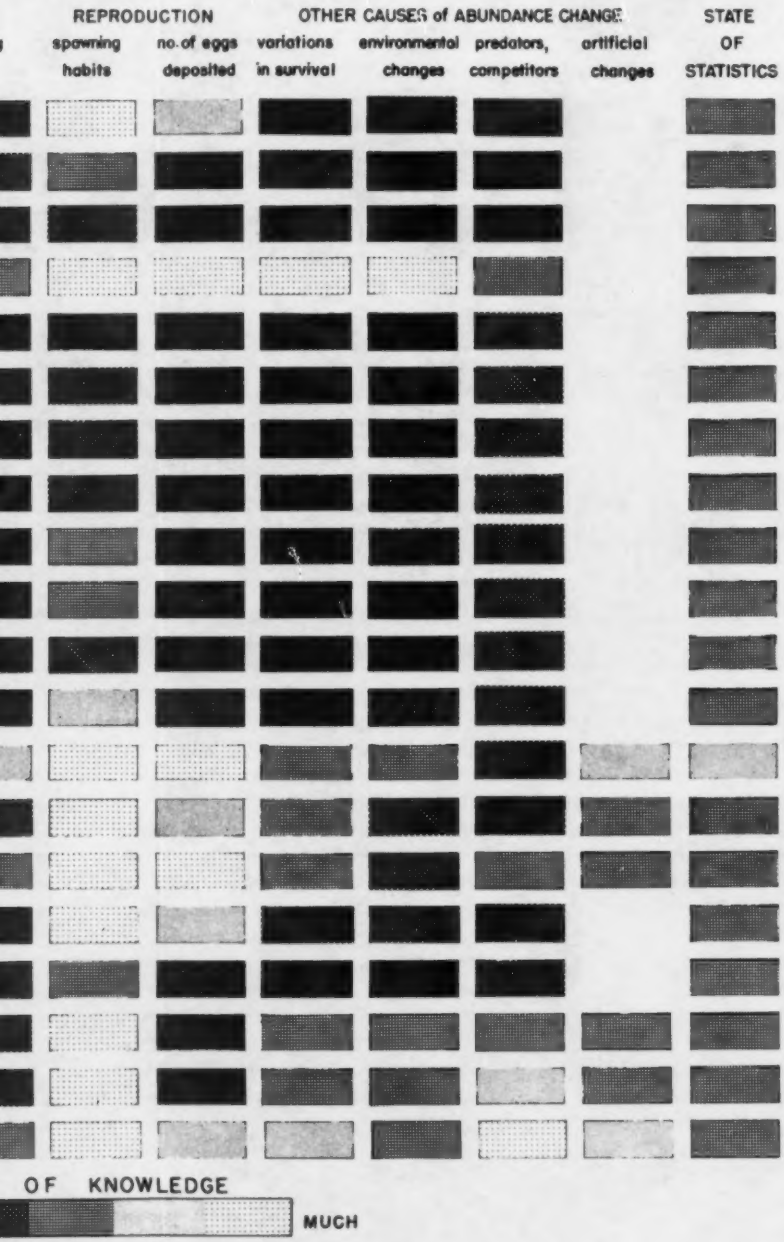
STATE OF KNOWLEDGE – MIDDLE



DLE ATLANTIC AND CHESAPEAKE FISHES



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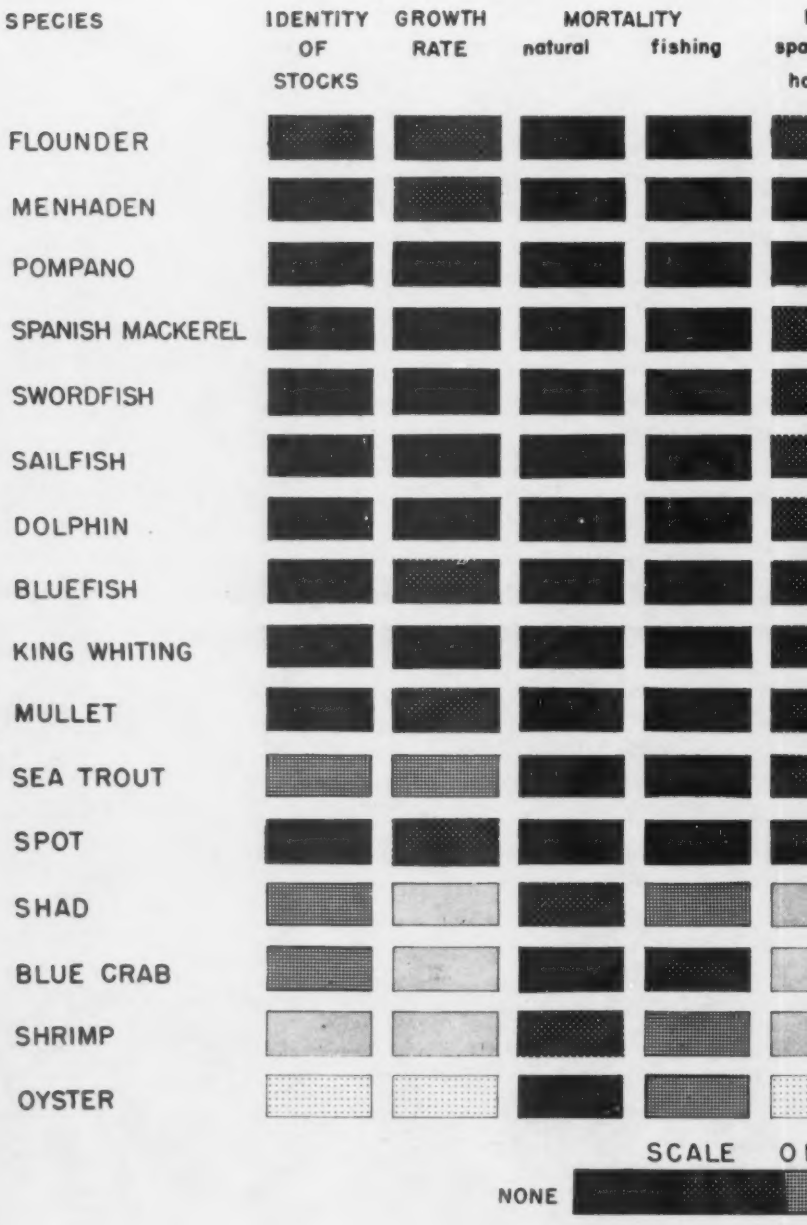
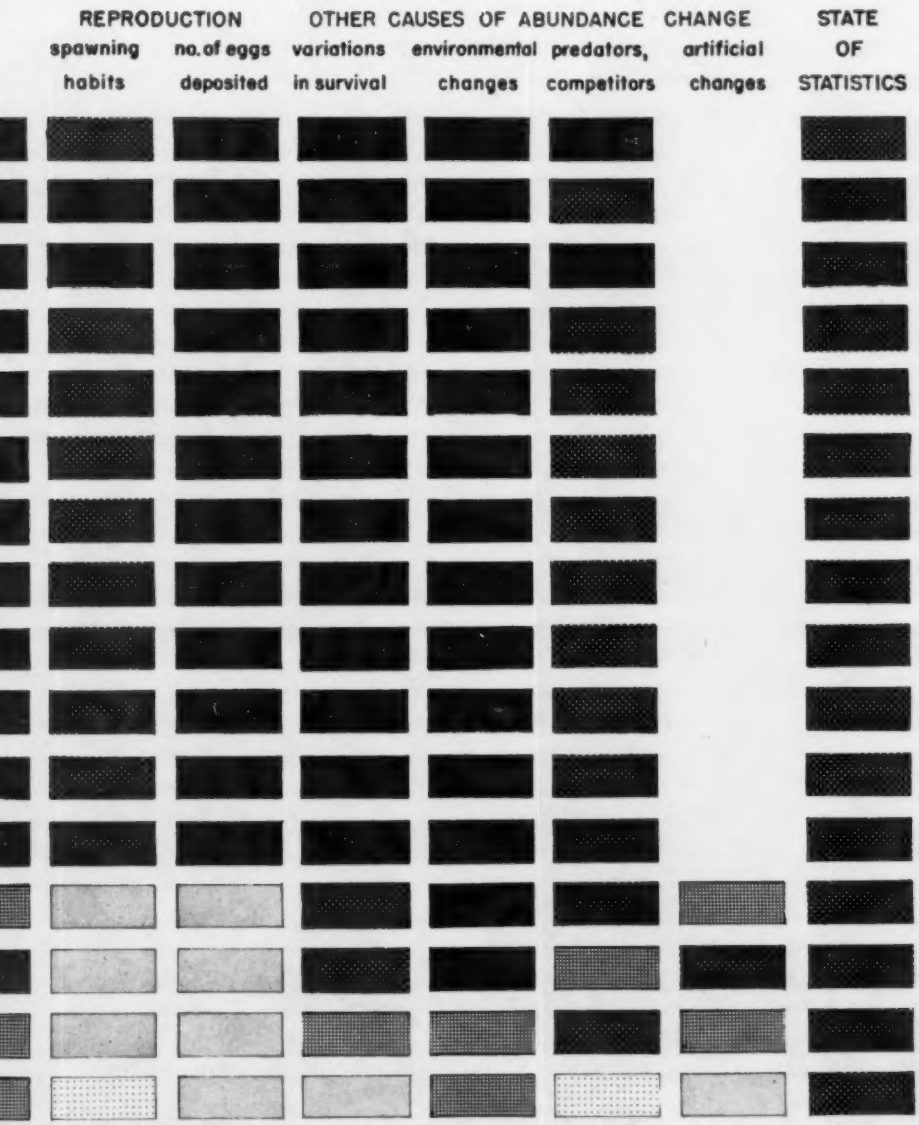
STATE OF KNOWLEDGE —



E – SOUTH ATLANTIC FISHES



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The oceanographer and the fishery specialist together must strive to provide a solid foundation of information upon which the industry can build to compete with world markets and provide a potential supply of seafoods with a high protein content for an increasing population.

Constructive marine research must be increased and encouraged but never switched on and off like a light. It is our firm belief that with the transfer of funds as provided in this legislation at least a start can be made to obtain more of the vital information regarding the vast marine resources which surround our continent.

STATEMENT OF JOHN D. KAYLOR, SECRETARY-TREASURER OF THE NEW ENGLAND FISHERIES TECHNOLOGISTS

Mr. KAYLOR. John D. Kaylor. I am secretary-treasurer of the New England Fisheries Technologists. We are located in Boston. I wish to file a statement with the clerk.

(The statement is as follows:)

My name is John D. Kaylor. I am secretary-treasurer of the New England Fisheries Technologists who endorse H. R. 7641. Our organization is composed of technologists and specialists in various sciences who have associated themselves for the purpose of expanding the usefulness of technology in the fisheries common to our region. One of our objectives is to promote better understanding of the application of scientific knowledge to fisheries problems.

Now that phrase "application of scientific knowledge to fisheries problems" implies two significant considerations. The first is that scientific information is available and the second is that there are problems in the various fisheries. We acknowledge that there is a certain amount of such information available and already being put to good technical use. At the same time we must also confess that where we now have a pool of information what we really need is an ocean of knowledge.

We need it and we need it badly. It's through technology that we can help ourselves in spite of rising costs and ever-increasing imports from subsidized fisheries of foreign nations. Not only do we have these handicaps of rising costs and imports but we also have additional handicaps not even dreamed of by other food producers.

Consider raw material: A farmer sows seed and protects the growing plants against insects and diseases. He reaps his crop at the desired stage of maturity. He can even replenish the very soil itself when it shows signs of exhaustion. He can in a large measure then, exert control. He does all these things by applying scientific knowledge to agricultural problems.

Now let's look at the fish business. Unlike the farmer, we reap but don't sow. We can't put a fence around schools of fish to keep out enemies. We can't see how fish act in the bottom depths when conditions change. We don't know for example, what conditions prevail when we get good catches. We don't know what conditions might explain poor catches. We're not entirely certain that our nets are as efficient as they could be. We can guess at the answers. Maybe our guesses are pretty shrewd but they are poor substitutes for facts.

Basically, fish are simple creatures with few desires—a full belly—a reasonable chance to escape enemies, preservation of the race, optimum temperature. What's more, they're not intelligent. Yet they do a pretty good job of leaving us holding an empty net, tow after tow. That doesn't mean our I. Q. is lower than that of a haddock. But it does mean we lack basic informaton.

Information that tells us when and why not to fish on what's normally considered good fishing grounds. Information that not only tells us that the fish have left but what prompts them to be where they "ain't."

That's the stuff we need. And that's exactly the type of information that's too big a job for private industry to undertake.

The reason is simple. Getting information like this is like working at a tremendously complicated jigsaw puzzle. It takes years of effort. Continuous effort directed at basic research. It takes special equipment aboard vessels designed for carrying out technological research over a long period of time. Nobody can predict how long that time will be. But unless it is continuous, it will be a waste of money. Not only a waste of money but also time that can never, never be regained.

Information of this kind and like that which is spelled out in the brief filed by the New England Fisheries Committee is needed badly. Getting this basic information is a proper function of the Federal Government. It's too huge a task for industry to pick away at piece by piece. The big advantage of the Government's role is that the facts will be available for all interests. But most of all, it can be better organized and systematized.

And order is of the essence. Without it there would be nothing but a terrific welter of details. Just so many pieces of a jigsaw puzzle. All meaningless unless arranged into a significant picture.

We consider that the Fish and Wildlife Service of the Department of the Interior would be the proper agency to do this work. It is our considered opinion that transfer of the funds as contemplated by H. R. 7641, would be of inestimable value. The funds involved are not very large but they will help to supplement the regular budget.

Only a shoal-draft intellect would fail to realize the benefits that would accrue. Judicious employment of these funds would result in more efficient utilization of fishing time and boats (both inshore and deep-legged vessels), gear, shore plants, and facilities. Costs could be reduced, thereby making us more competitive with subsidized foreign imports. A greater uniformity of higher quality food would then be afforded to Mrs. Consumer throughout the country at reasonable cost.

Mr. CHAPMAN. W. M. Chapman, director of research of the American Tuna Boat Association, San Diego, Calif., appearing also in behalf of the Fishermen's Cooperative Association of San Pedro and the San Diego Harbor Grangers.

We are in favor of this bill and would like to submit a written statement.

Mr. NORBLAD. Very well.

Mr. HART. Lawrence J. Hart, I am secretary of the Gloucester Fisheries Association. I would like permission to file a statement within the next few days.

STATEMENT OF GEORGE E. STEELE, EXECUTIVE SECRETARY OF THE SOUTHEASTERN FISHERIES ASSOCIATION

Mr. STEELE. George Steele, executive secretary of the Southeastern Fisheries Association and I appear in behalf of the Texas Shrimp Association and the Shrimp Association of the Americas. We would like to file a statement.

(The statement is as follows:)

STATEMENT OF GEORGE E. STEELE, JR., EXECUTIVE SECRETARY, SOUTHEASTERN FISHERIES ASSOCIATION, INC.

My name is George E. Steele. I represent the Southeastern Fisheries Association, Inc., with offices in Jacksonville, Fla., an organization representing the fishing interests of Florida, Georgia, Alabama, North Carolina, and South Carolina. Following the unanimous adoption of a resolution supporting H. R. 7641 by the board of directors of the Southeastern Fisheries Association, I have been directed to appear before you in support of the said legislation.

American fishery industries have evolved and grown spectacularly in the last 25 years, partly as a development of mechanization of fishing and the development of new techniques of preserving, storing, and marketing, and partly as a result of the demands of our growing population. With this growth of our industries, we who are engaged in the business of fishing have become ever more aware of limits to these resources from which we earn our living. It is becoming evident to an increasing number of us that we are not now getting value out of our fishery stocks. Some of us are fishing too hard, harvesting at too fast a rate and thereby not allowing the fish to grow to their most profitable size. Others are fishing too little, and thus wasting produce of the sea. We have seen fishery stocks disappear for awhile leaving the industry that depended on them temporarily paralyzed, unable to adapt itself to another species during the period of scarcity. It is clear to us that the fishery industry needs more science to adjust our fishing rates, to

direct our fishing effort into the most profitable channels—not merely profitable to ourselves in dollars, but, from the long-range viewpoint of practical conservation, profitable to the Nation in food. To us in the fishery industry, the greatest service which this needed fishery science should perform is to predict fluctuations in abundance and occurrence of our fish stocks, to warn us of impending abnormal conditions as far in advance of their effects as possible so that we can govern our operations accordingly.

There is no question that it is a proper function of Government to carry on such a service; for the necessary scientific research is far beyond the capacity of industry, State, or university efforts. And the Government should engage in this research for all the Nation's fishery resources, not just for a few certain ones that happen to be at a low ebb of production.

In general, our fishery biologists of Federal and State Governments have been given too little to work with and have been expected to do too much with the limited funds that have been available. Thus they have been able to study only a small fraction of all the fishery species. They all tell us that one of the most important things they have learned is that all of the fishes and shellfish in an area live in a complexly interlocking system in which competition for food and space plays a very important part. We are also told that the ocean currents, which fluctuate continually in direction and speed, control the food supply, consequently the abundance and distribution of the fish. Unless we study all these elements in relation to each other, how can we understand any one of them.

The preceding is a brief summary of some of the areas of fishing research that are desperately needed by the entire fishing industry. We should now like to give some specific details on some of the areas of fishing investigations sorely needed by the Southeastern States of our Nation.

SHRIMP

Shrimp are our most valuable fishery resource in the gulf. Their value to the fishermen was about $45,000,000 in 1952. The market for them has expanded greatly in recent years, and the fishermen have fished harder and have gone to more distant grounds. Total production has been high but catches are not now as good for the same fishing time as a few years ago.

Further, production from local waters is less so industry men in the gulf are wondering whether the shrimp beds are becoming depleted. They also question why brown shrimp are now so much more plentiful in the western gulf than previously and why the numbers of white shrimp have declined in this area. Are changes occurring in gulf waters which will affect production? Changes have occurred in the kinds of shrimp caught and in the places where they are caught, but no one knows what this means in relation to dependable supplies of shrimp.

Research should be started to answer these questions. The industry should know whether their fishing practices are sound and whether they can depend on a good supply of shrimp.

Perhaps production can even be increased through research. Shrimp grow rapidly, so with proper nets the small ones might be saved and then caught later when they are more valuable. Perhaps the fishermen can catch just as many shrimp with less fishing if they fish at the right places and in the right season.

OYSTERS

The oyster industry has occupied an important position in the economy of the Gulf States for the past 50 years. It provides employment for hundreds of our fishermen and for greater numbers of people in the processing and distributing plants. The most recent figures show that our southern oyster provides nearly 6,000 tons annually of the most nourishing kind of food to the Nation and adds approximately 10 millions of dollars to the economy of the Gulf States.

But the figures show also that there has been a tremendous drop in production and we are now producing in Florida for example, only one-fifth of our former yield. In the past 50 years, when technical know-how and the need for increasing our food supplies have been steadily increasing, the production of oysters has been steadily going down.

In many cases we know the reasons for this decrease. Overfishing, natural disasters, such as floods, hurricanes, and pollution have all played some part. These problems have been mostly localized and were solved in the past by State and Federal biologists who conducted short-term surveys and investigations. Recommendations for increasing the amount of cultch on the reefs for young

oysters to grow on, transportation of small oysters to better growing grounds and the rebedding of market oysters to better areas for fattening have all helped improve both the quality and quantity of oysters harvested in some places.

Despite these advances, we have seen large sections of our oyster-producing areas drop out of production entirely. Canneries employing hundreds of people have had to shut down and oystermen have had to turn to other work in order to make a living.

We realize the urgent need for more knowledge about the oyster and in the past 20 years all of the Gulf States have appropriated large sums of money to establish research laboratories and to increase the cultivation of oysters.

We realized too, that many of the problems did not exist in 1 area or 1 State alone but were found throughout the gulf and so we requested the former Bureau of Fisheries to establish a permanent laboratory which could study problems common to the entire gulf area. Excellent facilities were acquired for this work at Pensacola, Fla., 14 years ago and the States have benefited greatly from the work done there.

Unfortunately, budget limitations have prevented full development of this laboratory; in fact, in some years it has received no appropriation at all. Most of the time they have been able to employ only one full-time biologist. Despite this limitation, they have made good progress in uncovering the background information essential to a full-scale investigation of the problems of the oyster industry. In recent years, too, valuable contributions have been made by one State laboratory and by investigations supported by the industry.

We feel that an expansion of this laboratory's program at the present time would produce the greatest benefits to the oyster industry. One of the problems that needs attention now especially is how to control the oyster drill. This is a small snail which destroys over a million dollars worth of oysters each year. This snail can wipe out the entire population of an oyster reef in a single summer when conditions are favorable for it, and we have no economical way of controlling it.

Another problem which requires a greatly expanded research program is to find out why oysters in some places grow much faster and are of far better quality than in other areas. If we had the answers to these problems the industry could expand tremendously. But these questions are of such a general nature that they are largely beyond the scope and capacity of our State laboratories which are overburdened now in solving problems that are of local importance.

At times, we have disastrous outbreaks of disease on some reefs, and our oystermen lose their entire crop before it can be harvested; and we have almost no knowledge of the causes of these epidemics, let alone methods for preventing them. We need much more knowledge about the enemies of oysters and how to control them. We need to know why oysters have disappeared from some areas entirely. We need far more information on how to select and develop new areas for cultivation to replace those that have been lost because of industrial pollution and by natural changes.

The following figures show the actual decline in oyster production just in the State of Florida and indicate the huge loss to the economy of the South.

Year:	*Production (pounds)*	Year:	*Production (pounds)*
1902	3,057,000	1940	877,000
1910	1,140,000	1950	902,000
1930	1,787,000	1951	680,000

MENHADEN

Fish meal has become an important supplemental feed ingredient in the Nation's poultry, hog and cattle industries. During the early 1940's most of the meal was furnished by the California sardine and Alaska herring fisheries. However, with the collapse of the sardine fishery in 1947 and the progressive decline of the herring fishery, menhaden of the gulf and Atlantic coasts became almost the sole source of domestic meal. Consequently, the menhaden fisheries in these areas greatly expanded, and with this expansion, problems have arisen which must be solved.

As in the case of many of our fisheries, menhaden are subject to great changes in numbers, periods of good catches may be followed by several years of poor catches. A thriving menhaden fishery in the Gulf of Maine suddenly collasped in the late 1800's. Except for 1 year stand, menhaden have not returned to that area. There has been a decline in the catch along the south Atlantic coast.

Landings in the Gulf of Mexico have gone upward from the early times of this fishery. Some of the catch records are:

Year:	*Catch in millions of pounds*	Year:	*Catch in millions of pounds*
1936	3	1949	276
1940	25	1950	326
1945	65	1951	358
1946	71	1952	459
1947	100	1953	429
1948	219		

Although landings have steadily increased, it is important to know whether the increase was due to economic causes or to larger numbers of fish. Advanced knowledge on such apparent changes would be useful in planning for future seasons.

In connection with these proposed menhaden studies, we should like to point out that many of the important fish in the gulf seem to live in the same areas and in the same kind of waters. For instance, the menhaden are found along the shores and in the inside waterways, and so are the mullet. Biologists studying commercial fish in these areas probably will learn considerable about all types of fish living there; particularly mullet, another species which we know relatively little about at this time. The production of this fish in the gulf is higher and is more important in dollar value than most persons think. For instance, the average production of mullet in the gulf has been between 25 and 30 million pounds in the last few years, and this has paid over $3 million a year to the fishermen.

STATEMENT OF HERMES GAUTIER, CHAIRMAN OF THE GULF STATES MARINE FISHERIES COMMISSION

Mr. HERMES. William J. Henry, vice chairman of the Gulf States Marine and Fisheries Commission. I represent Hermes Gautier, chairman of the Gulf States Marine Fisheries Commission.

(The statement is as follows:)

STATEMENT OF HERMES GAUTIER, CHAIRMAN GULF STATES MARINE FISHERIES COMMISSION

Since the creation of the Gulf States Marine Fisheries Commission, July 16, 1949, the interest of the States party to the compact in the salt-water fisheries has continued to show a year-to-year increase. Appropriations made by the several State legislatures has been comparable with the mounting interest in the marine fishery resources. Research laboratories have been constructed, research facilities have been expanded in the laboratories which were previously established, boats and vessels have been purchased and properly equipped, programs designed to develop better knowledge of the fisheries have been instituted. Funds have been provided to both the State conservation agencies represented on the commission and State universities.

The Gulf Coast States believe it to be the duty of the State to provide funds for use in such investigations as will bring about a better understanding of the State's marine fishery resources, and to the greatest extent possible before moneys are requested from the Federal Government. However, such State appropriations have reached levels which now cause it to appear appropriate to request Congress to support participation of the Department of the Interior, Fish and Wildlife Service in a full scale investigation of the several species of shrimp common to the waters of the Gulf of Mexico.

The Gulf States Marine Fisheries Commission has realized for several years that the shrimp resources should be thoroughly investigated but of necessity delayed action until such time as all agencies which would be concerned with a full scale program were in position to supply the cooperative effort essential to the success of a program of such magnitude. In latter 1953 the commission requested Federal, State and State university scientists to meet and determine the present state of knowledge of shrimp and to suggest a research program deemed essential to the procurement of information upon which proper conserva-

tion measures could be based. The program suggested by the scientists was carefully studied for a period of 3 months before it was adopted at a special meeting of the commission in January of this year.

The program which was adopted was incorporated in a resolution which requested participation of the Fish and Wildlife Service. The Service stated in response that it thought the commission was wise in its concern over the future of gulf shrimp resources and deserved its support and cooperation in the commission's actions to coordinate and set up biological research so as to develop proper shrimp conservation measures. It was explained, however, that the budget estimates for the fiscal year ending June 30, 1955, include request for $110,000 to conduct biological research in the Gulf of Mexico, and that, of the mentioned amount $65,000 may be available for controlled laboratory and field experiments on shrimp and menhaden.

Attached to these remarks are the following:

Copy of resolution herein referred to, same having appeared in the Congressional Record—appendix under date of February 2, 1954.

A review of the shrimp research program adopted by the commission.

The various items of research provided for in the program would require Federal expenditures as follows:

First year	$554,000
Second and third years	454,000
Fourth and fifth years	354,000
Sixth and succeeding years	264,000

The Fish and Wildlife Service has estimated the 1953 shrimp landings on the Florida westcoast and in Alabama, Mississippi, Louisiana and Texas to have amounted to 212,208,000 pounds, heads-on weight, and to have been worth $48,770,000 to the fishermen.

The commission believes final and official 1953 Service records will show shrimp either at or very close to the top of the list of United States fisheries when considered from a standpoint of ex-vessel value.

It is probable that less research has been accomplished on the important shrimp fishery than any other major fishery.

Shrimp production per unit of effort has declined which could indicate a trend toward depletion.

Being ever mindful of its obligation to prevent as far as possibie the physical waste of the fisheries of the gulf, the Gulf States Marine Fisheries Commission respectfully requests this committee to seriously consider the approval of H. R. 7641 since its passage would doubtless result in such funds being made available to the commission's primary research agency, the Fish and Wildlife Service, as would be required for participation in the proposed and seriously needed shrimp investigations.

RESOLUTION

Whereas the Gulf States Marine Fisheries Commission is deeply concerned about the future of the shrimp resources in the Gulf of Mexico and recognizes the need for a major shrimp research program; and

Whereas the shrimp of the Gulf of Mexico is one of the most valuable fishery resources in America; and

Whereas the number of vessels and men engaged in shrimp fisheries has vastly increased in recent years, and the area of fishing has spread to far distant grounds, and although the catch has grown tc an alltime high, the catch per unit of fishing effort has become reduced; and

Whereas the distribution of the various kinds of shrimp in the Gulf of Mexico and the species composition of the catch have changed strikingly in recent years; and

Whereas the member States are carrying out individual research programs which are inadequate; and

Wheaeas the commission will serve as a coordinating agency for development of a major shrimp research program in the Gulf of Mexico; and

Whereas assistance of the United States Fish and Wildlife Service is desirable and necessary in the development of such a program; and

Whereas the Gulf States Marine Fisheries Commission named a committee of scientists representing State and Federal conservation agencies and universities, and requested them to draw up a plan of biological research on the shrimp resources of the Gulf of Mexico; and

Whereas according to such committee and in the opinion of the commission there is needed over and above the sums available for such research in the member States, $554,000 based on an estimate as follows:

1. Establish useful and adequate statistics:
   Cost: $80,000 annually.
   Length of time: Permanent.
2. Sampling the catch for size and species composition:
   Cost: $59,000 annually.
   Length of time: Permanent.
3. Development of marking techniques:
   Cost: $50,000 annually.
   Estimated length of time: 3 years.
4. Differentiation of species and stocks at all ages:
   Cost: $50,000 annually.
   Estimated length of time: 3 years.
5. An ecological study including the following: (*a*) Mechanisms which transport larvae into inside waters; (*b*) general ecology of nursery grounds:
   Cost: $190,000 first year; $90,000 after first year.
   Estimated length of time: 5 years.
6. Maintain a record of man-made and natural changes in the physical environment:
   Cost: $35,000 annually.
   Length of time: Permanent.
7. Purchase and maintain laboratory equipment:
   Cost: $40,000 annually.
   Length of time: Permanent.
8. Administration and publication of results:
   Cost: $50,000 annually.
   Length of time: Permanent.

Now therefore be it

Resolved by the commission, That the United States Fish and Wildlife Service be requested to join in such a program and make funds in the amount of $554,000 available as above set out; and be it

Resolved, That the chairman of the commission appoint a committee composed of at least one marine biologist from each member State to coordinate this program and report to the commission the findings resulting therefrom in order that they might be published by it; and be it further

Resolved, That the commission hereby pledges its help and support to the United States Fish and Wildlife Service in whatever action may be necessary in Congress or otherwise to make these funds available.

(The foregoing is a copy of a resolution adopted by the Gulf States Marine Fisheries Commission at a special commission meeting held January 21–22, 1954, at the Edgewater Gulf Hotel in the city of Edgewater Park, Miss.)

Review of Shrimp Research Approved by the Gulf States Marine Fisheries Commission

By Dr. Gordon Gunter

Mr. Chairman, ladies, and gentlemen, whether or not I fulfill your expectations I feel particularly honored in coming to New Orleans especially to talk about shrimp, for in a way it completes a full circle for me. My first job was with the shrimp investigations for the old Bureau of Fisheries here on the Louisiana coast almost 25 years ago.

Our shrimp belong to the family Peneidae, which is a warm temperate and tropical family having its center of distribution, so far as numbers of species are concerned, in the Indo-Pacific area. They seem always to be most abundant around estuarine areas and large river mouths. There are four species of commercial importance in the Gulf of Mexico. These are the white shrimp, pink shrimp, brown shrimp, and the seabob, which is used for drying. There are some six other species in this area but they are not of commercial importance.

The industry first changed from its purely local scope to one of national and worldwide interest, when the canneries got started about the turn of the century. They had lots of trouble in the beginning. The cans were first lined with paper. Shrimp often spoiled and turned black in the can, but finally the problems were

licked. Shrimp were originally seined and I have seen seines in operation which were 1,000 fathoms long, that being a little more than a mile. The last seines were used a few years ago and the fishery now uses the otter trawl exclusively. This gear came into use about the time of the First World War.

Formerly we were concerned only with white shrimp and to a lesser extent with the seabob.

The first worthwhile work on the biology of the white shrimp was carried on by Mr. Percy Viosca 35 years ago. He found that shrimp spawn at sea, that they make their way into inside waters, may grow up in as brief time as 6 months and return to the sea. That is a brief summary of the life history of the shrimp and Viosca deserves full credit, which incidentally he never obtained, because his results were not published in a national journal and not all of them under his own name.

Weymouth, Lindner, and Anderson, 1933, rounded out this picture in detail with presentation of total length-frequency curves of the population, as these were shown in the commercial gear. Theirs was the first fully presented picture and to date is the most important publication from the Federal shrimp investigations. Pearson worked on larval stages and outlined the general picture although the precise number of stages still is unknown. Various short papers were written on the development of eggs in the ovaries.

A few yeas ago I stumbled into data indicating that young white shrimp come into low salinity waters in two groups during the spawning season and grow at the rate of about one twenty-fifth of an inch a day. This explains the last general gap in the life history of postlarval white shrimp. I did not know that the idea of fast growth was advanced long ago by Viosca.

Mr. Burkenroad's chief contribution was to differentiate the old species, *Penaeuis brasiliensis*, so-called, into two—the pink and brown shrimp. There is a true *P. brasiliensis*, but it has not been reported from our area.

A Dane, named Heegaard, worked on larval shrimp at our laboratory. His chief contribution was to show that the number of larval stages are in doubt.

There have been other works, some unpublished. I am happy to say that Dr. Walford has informed me that the Fish and Wildlife Service shrimp report, which we have been expecting for some time, is almost ready for press, and should be out in a short while.

The Miami group has done some work on the pink shrimp in Florida and I understand that this work is continuing. Mr. Harold C. Loesch is carrying on a study in Mobile Bay.

That brings us roughly to the present on shrimp research. In the past 5 years the whole fishery has changed. The pink and brown shrimp have been heavily exploited. We have not learned enough about white shrimp to exploit or control the fishery properly and suddenly the problem has grown three times as large.

The need for a gulfwide program has been felt for a long time. Several people have worked on the outline and probable costs of this program, which has already been presented to you. I am supposed to explain that program. That is something of a problem for, in the first place, I never saw a research program find precisely what it set out to get and similarly a research program always runs into other things and makes discoveries which were undreamed of. The reason being, of course, that we are always groping in the dark, otherwise there would be no need for a research program.

In general terms, this research program and most others can be defended by some simple considerations. Ignorance of any situation will lead always to error sooner or later and often to catastrophe. We feel the need to know, to push back the barriers of ignorance. Learing is both an individual and a racial process. Racially we learn by observing new facts and putting them in print. Research is purely a device for increasing the incidence and rate of discovery of new facts. We want them particularly on shrimp.

That brings us to the specific problems. These can best be discussed under the Description of Problems, as listed in the various mimeographed reports of this commission. I shall take them up one by one.

1. Why must we know the life history of all important species?

The answer to that is almost self-evident. The general life history is the starting point or base toward understanding the production and standing of populations, which is the real point we are after, from the practical standpoint.

As I have indicated, we know it in the broad aspects for white shrimp. But we don't know precisely where in relation to the passes nor under what conditions

the shrimp spawn. We don't know how long the young float in the water nor what the chief food is at any stage.

The 200 million pounds of shrimp caught per year probably consume a billion pounds of food. Possibly a variation in food supply may largely explain variations in the shrimp supply. We might end up studying the variation in supply of some little worm, as a key to the whole thing.

Concerning pink and brown shrimp we know very little. I am told that fishable concentrations of pink shrimp are found only on shell and coral sands and that the Florida pinks raise in Florida Bay.

We know that the browns do not school as the whites do and are distributed at a rate of about 5 to 7 pounds per acre, on the grounds. They do not go into quite so low salinities as white shrimp and go farther out to sea. They are caught on four more or less discrete grounds between southwest pass of the Mississippi and Obregon, Mexico, which is in the lower part of the Gulf of Campeche. Weymouth, Lindner, and Anderson stated that brown shrimp outnumbered whites in Barataria Bay in early summer in 1931 and 1932. I observed the same thing in Texas bays in 1941 and 1943. Apparently, they have always been with us. We don't know why white shrimp are caught in the day and browns mostly at night. It is a change of shifts for reasons unknown.

2. Why must we sample the catch?

Today on the Texas coast we don't know how many shrimp are taken in Mexico and how many in Texas waters. We know the landings fairly well, but not the production of Texas waters. That is an impossible situation. No matter how much else you know, you could never do anything by way of controlling laws, if you did not know who produced what and where.

But in sampling the catch we want to know considerably more than that. We want to know what sizes and species are caught where and when throughout the year and how much effort it takes and how these matters change seasonally from year to year.

Such sampling is a primary requisite to the general knowledge of the populations and scarcely needs further emphasis. If such sampling goes hand in hand with sampling of the undersized, noncommercial part of the population, on an adequate scale, we shall finally be able to see an orderly picture in the change of shrimp populations, and there is an orderly picture there if we can discern it. If this can be done thoroughly, then possibly some of the sampling can be stopped later and only key areas and times sampled.

3. Why is it necessary to determine the mechanisms by which the young enter inside waters?

The entrances to the bays, low salinity waters, are fairly restricted on most of our coasts. Yet shrimp spawn at sea and the young are relatively weak swimming parts of the floating life for 2 or 3 weeks. A Dane working on our coast said he found a cloud of shrimp larvae about 5 miles offshore, which slowly drifted toward our pass, Aransas Pass, as they grew. There is a possibility that he switched species somewhere in dozen or so stages and then there is a strong westward or southward current along these shores. How, then, could a cloud of several million shrimp larvae move directly across that current and hit a pass one-fourth of a mile wide, or a point less than 0.003 percent of the Texas coast, where passes are 33 miles apart on an average. And south of this point there is no place where white shrimp can raise for 1,000 miles. There is something very strange about it all. Is there a great waste or loss of shrimp larvae? Do the numbers entering the passes determine next year's crop or is there always an oversupply? By a study of the incoming supply can we predict next year's supply? How do these small atoms of life breast the forces of the everchanging sea? If you compare relative sizes to distances, the homing of the salmon is not a bit more marvelous. Here may be a main key to shrimp production.

4. Why is it necessary to learn how variations in the environment relate to size of the brood?

We know from other fisheries that the size of the annual crop is not usually related so much to the number of eggs laid, for there is nearly always a surplus, bu to what happens in the environment immediately after spawning. After hatching the young are in the most helpless, vulnerable stage of their whole life. Unusual changes in temperature may kill them or strong currents may sweep them away. They are highly restricted in the kind of food they can eat and if the proper food is not present in ample quantity they may starve. We know

nothing of these things and when you consider all the factors which must be just right for the microscopic young, the wonder is that you ever have a good crop.

6. Why is it necessary to tag shrimp?

Some tagging of shrimp has been done and the Fish and Wildlife Service has shown that shrimp migrate southward up to 300 miles in winter, along the South Atlantic coast, and return northward in the spring. But there is strong suspicion that these were very tough shrimp, like the centenarians in the human race who attribute their longevity to extensive use of whisky or tobacco. We need better tagging procedures.

We need to know not only where shrimp go but how fast they grow and how fast they die. That is the key to the whole proposition of protection. If you have a hundred pounds of shrimp that are going to be 125 pounds of shrimp a month hence, or even only 100 pounds of larger, better-grade shrimp, they should be protected and not fished. On the other hand, if there are going to be only 75 or 50 pounds left from this original 100 pounds, then they should be taken while taking is good. Both the mortality and the growth rate can be determined by tagging, with adequate sampling.

6. What can be learned by studying shrimp in the laboratory?

If we knew enough about the individual shrimp we could predict what shrimp would do in nature. We could study the influences of temperature, salinity, oxygen tension, turbidity, light, darkness, mud, food, other shrimp, and several other factors upon shrimp. We might be able, if good methods were developed, to rear the various stages and learn them completely and even learn something that way about the rate of growth. I am curious to know why brown shrimp are caught best at night and the white shrimp by day. Why does one species school heavily while the other does not. There are dozens of questions which can be worked out and answered in the laboratory.

The determination of proper tagging techniques will be essentially a laboratory job.

7. Why study the ecology of an inside area with particular attention to shrimp?

The inside grounds are the nursery grounds. Their study is particularly important for various reasons. In the first place these areas are subject to modification by man, and in ways which might be harmful to shrimp. We dont' know what little shrimp eat (or the large ones either) and we don't know what their chief enemies are. Is there an oversupply of young so that there is always heavy competition with one another—with shrimp eating shrimp—for space and food? In any case, if the nursery grounds change through natural or man-made changes in harmful ways, there will be no more shrimp.

We have become cognizant in recent years of the effects of influences from land on bay animals. Dr. Huntsman of Canada says the herring population in the Bay of Fundy changed with currents and salinity. Dr. Malcolm Owen, formerly of the State of Louisiana Oyster Division, has stated that good oyster years follow years of heavy rainfall. Two of us from Port Aransas have recently submitted a paper showing that white shrimp production on the Texas coast has been strongly correlated with rainfall ever since 1927, when the fishery first got started. There are certain indications that the real correlation is with salinity of the water, and we have predicted a resurgence of the white shrimp population when we get some rain, but there seems to be no hope of a test soon. After about 8 years of drought, we are almost 3 inches short so far this year.

8. Why is it necessary to establish and maintain a history of changes in the area?

Vast changes are taking place on this coast all the time. Recenty a group of geologists from the Scripps Institution of Oceanography published a paper purporting to show that Texas bays, at the present rate of deposition, will be filled up in 100 years. I'll bet they won't be—but this highlights the situation.

The Atchafalaya is trying to become the main outlet of the Mississippi. I have talked personally to people who forded it on horseback and crossed it on a little wooden footbridge about 90 years ago. Dr. Russell has stated that one of the largest deltas in the world is in the process of formation at the mouth of the Atchafalaya. These things have had vast effects on oyster reefs, some of which are known, and by and large the reefs seem to have moved landward during the past 60 years. But shrimp leave no tracks and we do not know what the effect on them has been.

Every levee, drainage ditch, canal, and spoil-bank changes the bay environment in some manner—and if we are ever to find out which way we are going, not only

with respect to shrimp, but oysters and fish as well, we must study these changes and record their history.

9. Why is it necessary to gather adequate statistics?

It seems to me to be useless and unnecessary to enlarge upon this. Without it you could not tell if the fishery were increasing or failing. You would not know where your most productive areas were, or in turn when one declined and another increased. In fact, adequate statistics fit so closely into the biological program that it is a hand-in-glove proposition and the biologist cannot get very far in portraying the whole picture without adequate production statistics. That matter is self-evident and needs no further comment.

10. Why is it necessary to differentiate the stocks?

Are the stocks one or many? Do little shrimp entering Barataria Bay return home to where mama and papa came from, or is mama a Floridian and papa a Texan? Are the stocks so different that what happens in Mississippi has no influence on Texas or is it all one big shrimp population, intermingling and commingling everywhere? You can never work out satisfactory conservation measures until the situation is known.

Now, each State has its own particular problems but the whole problem transcends all State lines and only if it is attacked as a whole will it be solved efficiently and in the foreseeable future. That fundamentally is the reason it is under consideration by this Commission.

In my estimation the value of this study will be of two kinds: First, it will yield information of immediate practical value to an important industry, and second, it will add generally to the sum total of human knowledge. We are probably no more intelligent than the Greeks, Romans, and Egyptians, but we know a great deal more. That vast increase in knowledge has come about because people observed new facts and recorded them on paper for later generations. Please note that word "recorded." It does no good to learn things and not record them in the public record. Any scientist or member of a laboratory group or organization, such as this proposed shrimp research group purports to be, who discovers new facts and does not record them properly in print, is essentially practicing a fraud, not only upon society as a whole, but upon the group and himself. For that reason the budget allows adequate funds for publication and those publications should start coming out within a few years after the work begins.

(The foregoing was presented by Dr. Gordon Gunter at a regular meeting of the Gulf States Marine Fisheries Commission, Jung Hotel, New Orleans, La., March 18–19, 1954.)

STATEMENT OF CLAUDE VER DUIN, MANAGING DIRECTOR, FEDERATION OF FRESHWATER FISHERIES, GRAND HAVEN, MICH.

Miss SCHULMAN. Marie Schulman. I would like permission to file a statement.

Mr. NORBLAD. Very well.

(The statement is as follows:)

STATEMENT OF CLAUDE VER DUIN, MANAGING DIRECTOR, FEDERATION OF FRESHWATER FISHERIES, GRAND HAVEN, MICH.

My name is Claude Ver Duin and I am the managing director of the Federation of Freshwater Fisheries, whose headquarters are located at 406 Howard Street, Grand Haven, Mich. The federation is composed of commercial fishermen operating on the waters of the Great Lakes and the midwestern rivers in the States of Minnesota, Wisconsin, Illinois, Michigan, Iowa, and Missouri. I am happy to appear in support of the above-mentioned bills which, if passed, will enable the United States Fish and Wildlife Service to render some additional and urgently needed services to a rapidly declining fresh-water fishery.

The fisheries of the three upper Great Lakes, namely Superior, Michigan, and Huron, are faced with the prospect of a complete collapse because of the invasion of the sea lamprey, a vicious marine predator. The sea lampreys, which have their origin along the east coast, have been found in Lake Ontario for more than 50 years. In 1931 the first specimen to be noted west of the Welland Canal was discovered in the Detroit River. During the next 4 years additional specimens were found in Lake Huron and as far west as Lake Michigan, near Milwaukee

Wis. By 1936 the parasites had succeeded in establishing spawning runs in several Lake Huron streams, and badly scarred lake trout began to appear in the commercial catch. By 1940 the catch of lake trout in Lake Huron began to decline and for the first time less than a million pounds of this species was produced by the Michigan fishermen. In a period of 8 years the annual production of lake trout from Lake Huron dropped from its normal average annual figure of a million and a quarter pounds to 4,000 pounds. There have been no lake trout taken from Lake Huron since 1950.

A program designed to bring the sea lampreys under control was drawn up in 1941 by members of the United States Fish and Wildlife Service and the Michigan Department of Conservation and representatives of the industry, but could never be carried out because of the shortage of critical materials and manpower brought on by the war. During the war years the lampreys spread from Lake Huron through the Straits of Mackinac and into Lake Michigan. The parasites worked their way southward through Lake Michigan, wiping out the trout population as they went.

So, 1944 was the last year in which the Lake Michigan fishermen produced their average number of lake trout, amounting to approximately six and a half million pounds. Each succeeding year showed marked declines in trout production until in 1952 only 3,500 pounds were produced from the entire lake. Lake Michigan, like Lake Huron, is now void of lake trout, the fish that had always been the backbone of the industry up until the advent of the sea lamprey.

The lampreys have now spread into Lake Superior, but thanks to the program of the United States Fish and Wildlife Service, and a new interest on the part of the Canadian Government, the spawning runs are being checked and the trout fishery maintained. A serious cut in the appropriation for lamprey control work on Lake Superior for the 1954–55 fiscal year may bring about a sharp curtailment of this work, and the Lake Superior trout could easily be lost to the lampreys.

The disappearance of the lake trout has forced the commercial fishermen to seek new sources of income, and they have turned to the cheaper, coarser, and less desirable species to maintain their production. Chub fishing, as an example, was a seasonal operation back in 1940 when trout were abundant. In that year the total production of chubs from Lake Michigan was only 1,647,500 pounds. This has risen steadily since the decline of the trout and in 1952 a total of 11,097,600 pounds were produced. These fish must be smoked before being offered to the public. We have now reached the point where the supply of chubs exceeds the demand and the fishermen are again faced with a new problem, that of finding an increased market for their production.

Other species, such as sucker, sheepshead, smelt, carp, and herring are being produced in ever-increasing quantities since the fishing effort has been shifted from the once-prized trout to the cheaper varieties. The fishermen find it difficult to market these relatively unknown fish in competition with better known species imported from the interior lakes of Canada.

The scientists who are working on the problems of the lake fisheries now predict that unless something can be done to harvest and utilize the rapidly increasing population of bloaters, a forage fish on which the lake trout thrived, the industry will be faced with an even greater problem. The bloaters are becoming so abundant that they foul the nets that the fishermen set for other species thereby curtailing the catch of the more desirable fish. The scientists predict that unless some method can be found for removing the bloaters they will eventually become so thick that all of the fish in the lakes will become dwarfed in size because of a shortage of food.

The invasion of the Great Lakes by the sea lamprey has so completely upset the balance of nature, that new problems are presenting themselves with each passing month. There is an immediate need for an intensified lamprey control program; an increased research program that will enable the proper authorities to bring back the lake trout and again establish the balance of nature, once the parasites have been brought under control; and a marketing program that will enable the lake fishermen to dispose of the species that they are now producing.

We know of no better way to accomplish this than through the use of funds derived from duties on imported fishery products, that in themselves, present the industry with a very pressing problem. The fishermen I represent heartily endorse the bills that would divert a portion of the income from duties on fishery products to projects designed to help our domestic fisheries. In their behalf, I urge you, as members of this committee, to report favorably on the bill now before you, for consideration.

STATEMENT OF PATRICK McHUGH, ATLANTIC FISHERMEN'S UNION

Mr. McHUGH. We support Congressman O'Neill's bill.
(The statement is as follows:)

The Atlantic Fishermen's Union is pleased to join in supporting S. 2802 as the original bill, filed some years ago in the House of Representatives by then Congressman Kennedy, was drafted by this union.

This bill represents, we believe, a first step in placing the fisheries in a very small way on a parity with agriculture. Agriculture, rightly, has had the support of the Federal Government not only in moves for a standard research into the chemistry and other sciences relating to foods but also in efforts for improved and more orderly production and marketing of farm commodities. The fisheries has similar needs and, like agriculture, is from time to me confronted by excess supplies and falling incomes. Whether the cause is due to depression at home or simply as a result of sheer productive ability, the results are the same. To the industry as a whole this problem of excess supplies in certain instances and an undersupply in others calls for immediate serious study. Anything that can be done from a technological and biological standpoint should be done to help minimize as much as possible the various problems of the industry. This requires a considerable amount of money as the fishing banks cover a vast area, extending out approximately 200 miles from shore and along the coast from Cape Hatteras to Labrador. Sufficient money has not been available to do the work that should be done in this field. This know-how can only be obtained through investigation and experimentation and it is all the more necessary now because of the impact of cheap foreign imports on the industry, along with the depletion of much of our fishing grounds which caused this industry to receive several million dollars less for its product during the year of 1953 than it did for any of the previous several years, and at the present time is faced with more serious problems than at any time in its history.

The finding of new areas that can be fished is very important. Also the utilizing of species of fish not now being used commercially as well as the freezing of fish at sea which is one of the most important are vitally needed by this industry. Also the equipping of a couple of Government vessels with Fishlube or Fishscope to scout around the banks and spot schools of fish on the bottom, possibly deeper than we usually fish at present, would be tremendously helpful to this industry as we know that the European countries have had to fish in deeper water than we normally do and also we should experiment on catching fish off the bottom in whatever depths they may be schooling.

Presently, the largest single specie caught in New England can normally be caught only in the daytime as when night comes they leave the bottom and do not go down again to the bottom until after daylight. Consequently, nearly half the time spent on fishing banks is lost as the boats lay idle until it becomes practical to fish again. If some way could be found to keep on fishing and catch fish when they are schooling off the bottom the trips could be shortened considerably as this time lost occurs in most any type of groundfishing, and the development of gear to overcome this problem would be a tremendous asset. Commercial fishermen, for economic reasons, cannot afford to spend time experimenting because when a vessel is on the fishing banks all of their time must necessarily be spent in trying to catch a trip as quickly as possible. If this money is forthcoming then no doubt some of the regular fishing boats could be used to do a certain amount of this work such as trying in deeper water and developing if possible equipment with which fish could be caught at any time.

While we have had a boat in New England this past few years to develop the freezing of fish at sea there never has been enough money available except for a few months in the summertime, whereas investigation and experimentation is a full time job and there should be money available to carry it on all year 'round.

Nearly 2 years ago when the scallop beds became fished out off of New York this organization called on the State and Federal Governments to make an investigation into the matter as the fishermen felt that some kind of conservation was needed for the scallop fishery and wanted suitable conservation measures put into effect similar to the Northwest Atlantic Treaty regulations which were put into effect for the groundfish industry. Part of the money could very well be used to aid the scallop industry in overcoming its problems as the industry is hard pressed at the present time.

There are other problems in the fishing industry which we have not mentioned but which we believe are sufficiently covered by others appearing before your committee. Knowing that the solution, to a great extent, depends upon adequate research into those problems, we strongly urge passage of this bill.

STATEMENT OF THOMAS J. RICE, EXECUTIVE SECRETARY OF THE MASSACHUSETTS FISHERIES ASSOCIATION

Mr. RICE. Thomas J. Rice, executive secretary of the Massachusetts Fisheries Association. I am also secretary of the New England Fisheries Committee, a committee which already has filed a statement in connection with this bill.

(The statement is as follows:)

BRIEF FILED WITH THE SENATE COMMITTEE, INTERSTATE AND FOREIGN COMMERCE, AND THE HOUSE COMMITTEE, MERCHANT MARINE AND FISHERIES, SUBCOMMITTEE ON FISHERIES, BY NEW ENGLAND FISHERIES COMMITTEE

This brief is presented in the name of and in behalf of the New England Fisheries Committee. Its fundamental purpose is to serve as a reference manual for use by the respective congressional committees during their consideration of the Saltonstall-Kennedy bill S. 2802 and the companion bills that have been introduced in the House by Congressmen Bates, O'Neill, and others.

It is a description of the several projects sorely needed to develop the commercial fisheries of New England. Every project listed herein has been studied intensively by the committee from the standpoint of economic necessity and of cost. Only those programs based on practical and fundamental principles of economics were considered for adoption and recommendation.

The fishery has many problems which can be solved by the proper application of integrated research programs. The money to be expended in conducting these projects is available; no request for an appropriation of Federal funds appears in this statement.

Our petition seeks an equitable distribution of existing funds. We ask that the moneys now credited to the United States Department of Agriculture realized by the assessment of duties on fish and fishery products imported into the United States be transferred to the Fish and Wildlife Service of the United States Department of the Interior. The transfer of these funds would enable the Fish and Wildlife Service to commence and to maintain the several projects described in this brief.

The New England Fisheries Committee consists of the following named individuals, representatives of fishery associations, and agencies of local State governments:

Thomas A. Fulham, vice president, Fulham Bros., Inc.; treasurer, Boston Fish Market Corp.; member, State Board of Natural Resources, Commonwealth of Massachusetts; chairman, board of advisers, panel 5, International Northwest Atlantic Fisheries Commission.

Francis W. Sargent, director, division of marine fisheries, Department of Natural Resources, Commonwealth of Massachusetts; commissioner, International Northwest Atlantic Fisheries Commission.

John Kaylor, secretary-treasurer, New England Fisheries Technologists.

Thomas D. Rice, executive secretary, Massachusetts Fisheries Association; secretary, Federated Fishing Boats of New England and New York, Inc.; member of advisory board, Boston Port Authority Commission.

Stanley B. Tupper, commissioner, Department of Sea and Shore Fisheries, Augusta, Maine.

Ralph G. Carpenter, director, Department of Fish and Game, Concord, N. H.

Massachusetts Fisheries Association, Boston, Mass.

Federated Fishing Boats of New England and New York, Inc., Boston, Mass.

Gloucester Fisheries Association, Gloucester, Mass.

Gloucester Fishing Vessel Owners Association, Gloucester, Mass.

Gloucester Whiting Association, Gloucester, Mass.

Atlantic States Marine Fisheries Commission, Mount Vernon, N. Y.

Stonington Lobster Cooperative, Stonington, Maine.

Fishermen's Cooperative Association, Vinalhaven, Maine.

Port Clyde Fishermen's Association, Port Clyde, Maine.

Pemaquid Fishermen's Cooperative Association, Pemaquid, Maine.
Boothbay Region Fishermen's Cooperative Association, Boothbay Harbor, Maine.
Biddeford Pool Fishermen's Association, Biddeford, Maine.
Federation of Maine Fishermen's Cooperatives, Pemaquid, Maine.
Atlantic Mackerel Association, Inc., Gloucester, Mass.
Atlantic Lobstermen's Cooperative, Inc., Saugus, Mass.
Warwick Fishermen's Cooperative Association, Warwick, R. I.
Point Judith Fishermen's Cooperative Association, Inc., Point Judith, R. I.
Connecticut Fishermen, Inc., Stonington, Conn.
Chatham Fishermen's Association, Chatham, Mass.
Gloucester Master Mariners Association, Gloucester, Mass.
Maine Coast Fishermen's Association, Finalhaven, Maine
Maine Fisheries Association, Portland, Maine
Maine Lobster Fishermen's Association, Millbridge, Maine
Maine Sardine Industry, Augusta, Maine
Maine Sardine Packers Association, West Pembroke, Maine
Maine Smoked Herring Packers Association, Lubec, Maine
Maine Wholesale Lobster Dealers Association, Portland, Maine
National Wholesale Lobster Dealers Association, Boston, Mass.
New Bedford Fillet Dealers Association, New Bedford, Mass.
New England Fish Commission Dealers Association, Boston, Mass.
Gorton-Pew Fisheries Co., Ltd., Gloucester, Mass.
North Atlantic Lobster Institute, Portland, Maine
Seafood Producers Association, New Bedford, Mass.
Seafood Producers Association, Provincetown, Mass.
South Shore Lobster Fishermen's Association, Minot, Mass.
The Southern New England Fishermen's Association, West Mystic, Conn.

A Program For New England Fishery Research

An integrated comprehensive program of fishery research is naturally divided into five parts as follows:

I. Biological: Oceanographic research necessary for a sane conservation program leading to an optimum annual crop from the sea.

II. A statistical program necessary for maintenance of authentic records of landings and prices for use of industry and as an aid to the biologist: Market news service is essential in keeping industry informed as to current market conditions.

III. Exploratory fishing and gear development to discover new fishing grounds and to improve methods of detecting and capturing fish.

IV. Technological studies to develop better methods of preserving, processing, distributing, and marketing fish and fishery products: Development of new uses for various species of fish and fish waste is an essential part of this program.

V. Education and market development: This would be a program designed to promote and stimulate wider use of fish.

Each of these parts is outlined herein with estimates of costs.

PART I. BIOLOGICAL, OCEANOGRAPHIC RESEARCH

The stocks of marine fish upon which the New England fishing industry depends are subject to great variations in abundance. There is a year-to-year fluctuation and sometimes great trends develop. Sudden drops in abundance can be disastrous as in the case of the disappearance of the California sardine. Depletion of a fish stock can result from overfishing or may be caused by natural conditions. It is the fishery biologist's responsibility to determine the causes of any variations in abundance.

To do this it is necessary to understand the biology of the species concerned, to assess the effect that variations in natural conditions have on these species and to know precisely how various levels of fishing effort affect the stocks fished.

A program to furnish the necessary information for such studies in New England includes an investigation of the biology of the important commercial species and regular hydrographic surveys to provide a continuous record of environmental conditions.

Following is an outline of the problems which must be solved if the management of the New England stocks is to be placed upon a sound basis.

(1) *Measurement of the effect of the mesh regulation for haddock fishing.*—In order to determine exactly how the mesh regulation is affecting the stocks of

haddock on Georges Bank, it is necessary to continue a detailed study of the population dynamics of that stock. This require a careful analysis in ports and at sea of fish caught and fish landed by the regular commercial fleet and by vessels licensed to use small mesh nets.

(2) *Prediction of the fate of the Georges Bank and other haddock populations.*—With or without regulation, the New England haddock stocks are in a precarious condition. Fishing has been too intense over the years and there is evidence of climatic change which may have a very serious effect on this fishery. Predicting the fate of these stocks or explaining changes in abundance requires a thorough knowledge of the effect which temperature, currents, and other hydrographic features have on the survival of the eggs and larvae. An annual census of young of the year and of 1-year-old fish is also essential. Studies of food habits and fluctuations in abundance of food are part of this program.

(3) *The biology of redfish.*—Research on this species is designed to determine how long the North Atlantic stocks can withstand present rate of exploitation and to determine how, if ever, the nearby New England stocks can be restored.

(4) *The biology of whiting.*—The exploitation of this species is increasing. Can this be safely done without seriously depleting the resource?

(5) *The biology of flounders.*—Research on those valuable species is designed to protect them against overfishing and the depredation of the trash fishery. Important questions of climatic change are also raised in the case of this fishery.

(6) *Biology of scallops.*—The valuable New Bedford scallop fishery has been maintained by the fishermen moving from bank to bank as individual beds are fished out. How long can this go on? Research on this species is designed to determine how new beds are formed, how fast the shellfish grow, and how much fishing they can withstand.

(7) *Clam and oyster research.*—Studies of the factors influencing the setting, growth, and death of commercial shellfish must be actively pressed forward if production is to keep up with increasing demand. Experiments in protection and culture of shellfish are a vital part of this research.

(8) *Environmental factors.*—The reactions of fish to such environmental factors as temperature, light, and type of bottom result in a fluctuation in their availbility. If more were known about the migrations of fish on and off the bottom and over extensive areas much valuable time would be saved by the fishermen in finding the fish in sufficient abundance for successful operations. Development of underwater detection devices can now be applied to this important problem.

(9) *Development of continuous recorders.*—In the study of the effect of environmental conditions on fish stock, it is essential to have continuous records from many locations. Continuously recording devices can be developed to obtain such records at reasonable cost. These instruments can be attached to lightships, buoys, trawls, and anchors.

(10) *The biology of the herring and mackerel.*—A program of herring and mackerel research would be designed to determine whether the Atlantic herring and mackerel are composed of a number of individual stocks and to reveal their history when they leave the range of the American fishery. Transmission of the herring pepper-spot disease must also be determined. The research on these species would necessarily be so extensive that a separate 80-foot vessel would have to be assigned to this program.

(11) *Effects of inshore dragging.*—In inshore waters there is a conflict of interest among the commercial ground fish, lobster, and sport fishery. The question of the effect that dragging has on the bottom, on lobster operations, on sport fish in nearby grounds and on other species of fish, is often raised. A program designed to obtain answers to some of these questions would require the exclusive use of a 60-foot research vessel.

(12) *Replacement of antiquated laboratories.*—The present condition of the Woods Hole Laboratory is an obvious example of conditions that exist in other New England areas.

(13) *Research vessels.*—The *Albatross III* is uneconomical for present needs. It is the plan of the Fish and Wildlife Service to sell this vessel and the *Alaska*, which is now in the Gulf of Mexico. With the funds realized on these sales a new vessel, about 120 feet in length, is to be purchased.

A second research vessel would be required if the flounder and scallop projects were initiated. An 80-foot dragger would suffice for this. This vessel could also do the fieldwork necessary for the redfish and whiting programs. At present some of the redfish work is done by charter.

Two additional vessels would be required for the herring, mackerel, and inshore dragging programs. Costs of the latter two vessels have been included in the cost estimates for the respective projects.

Estimated costs, part I

Project	Capital investment	Annual operating costs		
		For adequate program	Present allotment	Additional funds required
Mesh regulation		$45,900	$45,900	
Biology (Haddock)	$5,000	49,700	38,700	$11,000
Redfish		34,500	26,000	8,500
Whiting	10,000	17,000		17,000
Flounders	10,000	17,000		17,000
Scallops	10,000	17,000		17,000
Shellfish research		140,000	140,000	
Environmental factors	80,000	50,000		50,000
Development of continuous recorders	10,000	20,000		20,000
Herring	[1] 85,000	100,000		100,000
Mackerel	[1] 25,000			
Effects of inshore dragging	[2] 85,000	75,000		75,000
Replacement of laboratories	900,000	27,000	27,000	
Research vessels (not included above):				
120-foot vessel	350,000	137,500	77,500	60,000
80-foot vessel	100,000	62,000	2,000	60,000
Total	1,670,000	792,600	357,100	435,500

[1] Includes $100,000 for 80-foot research vessel.
[2] Includes $60,000 for 60-foot research vessel.

PART II. STATISTICAL PROGRAM

The present statistical program and market news service should be expanded to increase the canvas of landings in southern New England and to increase the service of market news.

Estimated costs, part II

Capital investment	None
Annual operating costs:	
For Adequate Program	$115,000
Present Allotment	$100,000
Additional Funds Required	$15,000

PART III. EXPLORATORY FISHING AND GEAR DEVELOPMENT

The trend in exploratory fishing research and gear development, especially noticeable in reports from foreign countries, such as England, Iceland, Denmark, etc., is to fish in extreme depths of from 250 to 500 fathoms. It is also the trend to develop new devices, such as sonar, asdic, electric fishing devices, television, etc., for the location of fish. At the present time, the offshore trawling fleet of the North Atlantic area operates under a 12-day trip limit during the winter months and a 10-day limit during the summer months. Owners of the vessels expect highest possible payloads and, consequently, operate on known fishing grounds where areas have deeper depths than those presently fished.

Throughout the Gulf of Maine and from Georges Bank to Grand Bank there are many areas that await the results of exploratory work before assessment of their value as fishing grounds can be determined. Successful fulfillment in the exploratory fishing and gear development program, while comparatively expensive, would accrue many benefits to the United States fishing industry.

A continuing program of exploratory fishing and gear development research for the North Atlantic area should encompass the following:

(1) Exploration of waters between Georges Bank and Newfoundland for discovery of unexplored fishing grounds for groundfish, such as haddock and ocean perch, should be carried out. This would entail research in areas of the Northwest Atlantic hitherto not fished, and also entail the exploration of fishing grounds in waters much deeper than those now fished. New devices such as sonar, asdic, electric fishing devices, television, etc., will be evaluated wherever possible in connection with the exploratory fishing program.

(2) *Tuna fishing.*—Limited research carried out by the Government during the past 3 years indicates that the industry in the North Atlantic area may be on the threshold of establishing a tuna industry. Trials in previous years included fishing for tuna with purse seines, long lines, and gill nets. Reports from fisher-

men fishing for other species of fish indicate that tuna can be caught on hook and line in many areas of the North Atlantic. A study encompassing the operation of a live-bait tuna clipper for operation in New England waters would, it is believed, add considerably to the knowledge of the evaluation of methods to be used in the capture of tuna and possibly provide the answer to the capture of fish of this species in large commercial quantity.

(3) *Shrimp fishing.*—It is believed there are promising potentialities in establishing a Gulf of Maine shrimp fishery to catch shrimp in sizable quantities, utilizing medium otter trawlers for fishing in deep water during the period March to August.

(4) *Herring fishing.*—The use of midwater trawls in foreign countries for the capture of herring indicates that the possibility of the adaptation of such fishing gear to the capture of herring in waters off the North Atlantic Coast might be fruitful. This type of gear is comparatively inexpensive and might pay off handsomely in the capture of herring. The use of detection devices, such as sonar, asdic, or related devices in the location of fish in midwater is contemplated in connection with a study of this kind. A vessel assigned to herring biological research could be used for this purpose. The study contemplated under this section should be applied simultaneously to the mackerel fishery.

(5) *Scallop fishing.*—Vessel owners, fishermen, and processors are of the opinion that fishing grounds of which scallop draggers now operate are being seriously depleted of this important resource. The North Atlantic scallop fishery is centered at New Bedford and contributes much to the economic health of that community. Discovery of new fishing grounds for scallops are essential if the industry is to continue to thrive. A Government-operated dragger for use in exploration of new fishing grounds is essential at this time. A vessel assigned to collecting for biological investigation of scallops could be used for this purpose.

Estimated costs, part III

Project	Capital investment	Annual operating costs		
		For adequate program	Present allotment	Additional funds required
Exploratory fishing and gear development (ocean perch, haddock, herring, scallops, etc.)	$30,000	$120,000	None	$120,000
Tuna exploration	5,000	45,000	$15,000	30,000
Shrimp exploration	5,000	20,000	None	20,000
Total	40,000	185,000	15,000	170,000

PART IV. TECHNOLOGICAL STUDIES

Funds obtained under S. 2802 (Saltonstall-Kennedy: to further encourage the distribution of fishery products and for other purposes) would enable technological research to be conducted on those basic problems which the industry cannot effectively handle by giving effect to the recommendations of the Secretaries of State and Commerce and of the United States Tariff Commission to the House Committee on Merchant Marine and Fisheries entitled "Effect on the Domestic Fishing Industry on Increasing Imports of Fresh and Frozen Fish" (see Document 18 under H. Res. 174), in which it is stated on page 68 under "Recommendation," "In view of the foregoing analysis, it would seem constructive for the Congress to provide funds for the appropriate governmental agencies to cooperate with and aid industry in developing and expanding progress for the further improvement of techniques and facilities for catching, storing, processing, transporting, and marketing of fish."

The provision that authorizes the Department of the Interior "to cooperate with other agencies of the Federal Government with State or local governmental agencies, private agencies, organizations, or individuals having jurisdiction over or an interest in fish or fishery commodities" should be implemented by funds obtained under the Saltonstall-Kennedy bill by cooperating with any recognized established school of fisheries in New England by providing facilities at Government technological laboratories for the training of graduate students by carrying out research projects for credit for advanced degrees; thus encouraging the students of these institutions to become interested in the fishing industry.

A continuing program of technological research for the North Atlantic area should encompass the following:

(1) Provision of adequate building and equipment facilities to carry out a comprehensive technologic research program. The facilities currently available for carrying out a limited technological program are of wood construction and house a small laboratory and pilot plant. They are in a very poor state of repair and indeed are inadequate even for the current work. The docking facilities at this location are in a state of near collapse.

Facilities in a new building would provide for technological laboratories, pilot plant area, dock-gear studies, and graduate-student training. Work of the type planned is such that the building and docking facilities be in a major fish-producing center in close proximity to fish-producing plants, freezers, and cold storage. It is also necessary that the station be located near educational institutions so that library facilities may be available.

(2) Provision of a suitable vessel and adequate vessel equipment for continuous operation in carrying out technological research, deck-gear development, and related research. It is contemplated that the research trawler *M. V. Delaware*, recently procured from the Department of Defense, will be used for the above studies.

(3) Develop methods for the preservation of fish on fishing vessels so that raw material will be of more uniform quality when landed and payloads of vessels will be larger. This should include research on the freezing of fish, chilling of fish in refrigerated sea water, study of the efficacy of antibiotics, such as aureomycin and others, in the ice that is used for the preservation of fish on vessels.

(4) Research on the byproducts of the fishing industry. This should include basic research on the waste from the haddock, cod, pollock, redfish, and scallop fishery, which is currently thrown away at sea. Investigations into the possible use of waste materials from fish as raw material for isolation of hormones, enzymes, biochemicals, and other such products should be carried out.

(5) Research on the food value of some of the newly developed fish products, such as fish sticks, frozen chowders, canned fish products, etc., should be carried out and published so that the consumer can be made more fully aware of the excellent qualities of fishery products as food.

(6) An extensive sutdy of the methods used in the handling of frozen fishery products after they leave the manufacturing plant should be undertaken. The adequacy of methods used in transit and frozen cold storage during distribution and at retail levels should be investigated.

(7) Develop new food and nonfood uses for species of fish now largely unused, e. g., mud hake, skate, shark, etc.

(8) Develop more fully for use as food such species as pollock, and others that are in great abundance.

(9) Develop physical and chemical tests for freshness of chilled and frozen fish and shellfish to provide means for control of quality of fishery products distributed to the consumer.

(10) Develop industry-approved standards and specifications for fishery products as an aid to efficient and practical marketing.

(11) Maintain a technical service unit designed to advise the fishermen and members of the fishery industries of the results of technological research and methods of industrial application.

(12) Research on the flavor components of fish with a view toward retaining the desirable flavor and increasing the palatability and acceptability of fishery products should be undertaken.

(13) Develop improved fillet-processing procedures through pilot-plant study of handling, sanitation, and packing.

(14) Develop improved deck gear on fishing vessels to reduce accidents to fishermen. High insurance rates for fishing vessels make studies of this kind imperative.

Estimated costs, part IV

Project	Capital investment	Annual operating costs		
		For adequate program	Present allotment	Additional funds required
Buildings and docks	$300,000	$30,000	$8,000	$22,000
Vessel (will use *M. V. Delaware*)	None	150,000	36,000	114,000
Research projects	100,000	150,000	56,000	94,000
Total	400,000	330,000	100,000	230,000

PART V. EDUCATION AND MARKET DEVELOPMENT

Funds obtained will be used to carry out studies designed to promote and stimulate wider use of fish. Studies would include fish cookery demonstrations, film showing, and informal discussions before school groups (school lunch), institutions, and service groups of civic nature. Market studies would be undertaken to ascertain the kind of fish products the consuming public likes best.

Estimated costs, part V

Capital investment	None
Annual operating costs:	
For adequate program	$35,000
Present allotment	8,000
Additional funds required	27,000

Summary of estimated costs for entire program

Project	Capital investment	Annual operating costs		
		For adequate program	Present allotment	Additional funds required
Part I: Biological-oceanographic research	$1,670,000	$792,600	$357,100	$435,500
Part II: Statistical program		115,000	100,000	15,000
Part III: Exploratory fishing and gear development	40,000	185,000	15,000	170,000
Part IV: Technological research	400,000	330,000	100,000	230,000
Part V: Education and market development	None	35,000	8,000	27,000
Total	2,110,000	1,457,600	580,100	877,500

Mr. NORBLAD. Mr. Laurence Curtis of Massachusetts, Member of Congress who could not be present, has written a letter to the committee which will be put in the record.

(The letter from Hon. Laurence Curtis of Massachusetts is as follows:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., March 30, 1954.

Re H. R. 5829, H. R. 7441, H. R. 7671, bills to further encourage the distribution of fishery products.

Hon. THOR C. TOLLEFSON,
New House Office Building 1117,
Washington, D. C.

DEAR MR. TOLLEFSON: I should appreciate it if I could be recorded at the hearing before the Subcommittee on Fisheries of the Committee on Merchant Marine and Fisheries as in favor of these bills. Certain proceeds from import duties have heretofore been allocated to the United States Department of Agriculture for special purposes. Furthermore, by subsequent legislation some of the amounts so allocated were directed to be used for purposes having to do with the fishing industry.

These bills are similar to S. 2802, introduced by Senator Saltonstall of Massachusetts and others, and would further allocate certain of the above sums for purposes helpful to the fishing industry.

That industry in Massachusetts and in Boston, part of which is in the 10th Massachusetts District, has suffered severely due to the tremendous increase in imports of fish products. I respectfully submit that the allocation of funds sought in these bills will be of great benefit to the fishing industry, and is in the public interest.

I should appreciate it if this letter could be introduced as my statement before your subcommittee.

Yours sincerely,

LAURENCE CURTIS.

Mr. JACKSON. Richard E. Reed of Maine was here yesterday and asked me if I would file with the clerk in his behalf a statement for the Maine Sardine Industry. I have so done and I ask it be included in the record.

(The statement of Richard E. Reed of Maine is as follows:)

NATIONAL FISHERIES INSTITUTE, INC.,
Washington D. C., April 1, 1954.

Hon. WALTER NORBLAD,
Chairman, Subcommittee No. 2 on Shellfish and Salt Water Fisheries,
Washington 25, D. C.

DEAR CONGRESSMAN NORBLAD: Attached is a statement by the Maine sardine industry on behalf of passage of H. R. 7641, and we would appreciate having our remarks included in the official record.

Sincerely,

R. E. REED,
Executive Secretary, Maine Sardine Industry, Augusta, Maine.

BRIEF BY RICHARD E. REED, EXECUTIVE SECRETARY, MAINE SARDINE INDUSTRY, AUGUSTA, MAINE

The Maine sardine industry unanimously went on record as favoring this legislation at a meeting held in Bangor, Maine, on February 26, 1954. Furthermore, in taking such action, the group expressed the opinion that at least one-half of the money which would be made available as a result of sardine imports should be used on projects which would be helpful to the domestic sardine industry, but this was not a definite stipulation of their support of the legislation.

None can dispute that this important Maine industry has a big stake in the legislation as Bureau of Census figures for the period 1949–53 show that of the $54,122,000 collected from import duties on all fishery products, sardines were responsible for 13 percent or $7,118,824. What is more the catching, processing and canning of sardines has been of basic importance to the overall economy of the State of Maine for 80 years. It involves an investment of many millions of dollars by 35 companies which operate 47 plants and provide employment for about 8,000 factory workers and fishermen.

Although they heartily subscribe to the theory that the Federal Government should generally give more support to the development and protection of its commercial fisheries our crowd now finds themselves in a positon whereby such assistance is desperately needed and needed fast.

The Maine sardine industry is faced with an emergency of real proportions. This has been brought on by an abnormal scarcity of fish in 2 of the past 3 years and scientists speculate that the situation may be a part of a worldwide change in ocean conditions and temperatures which is apparently affecting many fishery resources.

Naturally we hope that such thinking is wrong and feel that it is the responsibility and duty of the Congress to help the industry and the State finance research activity which is necessary to get the answer. Prior to 1951 there had not been a serious shortage of herring in Maine waters for 13 years. During the 1951 season catches and therefore sardine production was off more than 50 percent as compared with a 25-year average and in 1953 the situation was repeated.

This double blow has actually staggered our processors whose operations and profits are necessarily based on volume production in order to cope with their competitors in the food manufacturing field. Hundreds of fishermen have either gone broke or been forced out of business and scores of factory workers have not earned enough money to qualify for unemployment compensation.

It is recognized that a staff of experts with adequate equipment could not reverse the forces of nature but they can find the source of the trouble and at least give our industry an indication of which way to turn. It is imperative that we find out whether the condition is of a temporary nature or similar to the chain of events which has virtually destroyed the big pilchard sardine industry on the west coast.

The industry is willing to expend its own funds on this work and the State will contribute but the job is too big for them to do alone. It is estimated that the study should be continued for at least 5 years at an annual cost of around $125,000 and this bill looks to be the fairest and most logical source of funds as it does not add any further burden to the American taxpayer.

I would like to repeat that extensive studies of the North Atlantic herring resource should be launched before it is too late and we are sure that no Member of Congress wishes to see the Maine sardine industry become a desert of bankruptcies and dying communities for the lack of a diagnosis and a doctor.

Members of the Maine congressional delegation have been deeply concerned with this problem for some time and if this legislation is not approved we have no alternative but to ask our elected representatives to seek a supplemental appropriation for the United States Fish and Wildlife Service to finance the research.

Although the strange behavior of the fish is our industry's chief worry, at the present time it has many other problems and a growing pressure of foreign competition is one of them. Since the war Morocco, Yugoslavia, South Africa, Australia, and Japan have been concentrating on our markets while Portugal and Norway, our two largest competitors have expanded their merchandising activities in this country to a great degree.

We do not fear competition when the odds are even but it is a historical fact that the fisheries of the above-mentioned countries have always been given heavy government support while the situation has been reversed so far as our own commercial fisheries are concerned. Is this not another good argument in support of the legislation under consideration?

With additional funds the United States Fish and Wildlife Service should expand their marketing and educational activities as a further means of helping the American fish people to continue as a going and taxpaying concern.

We feel that the Service would spend the additional funds wisely and effectively in many fields and that the stepped-up activities would do much to counteract the favorable advantages now being enjoyed and utilized to the limit by our foreign competitors. We also subscribe to the theory of an industry advisory committee to assist the Service in its activities.

Although our group recognizes the importance of agriculture to the basic economy of our country they could not find any logical reason why the farmers of the land should receive such munificent support from our Government while comparatively none has ever been given to the farmers of the sea. We do not have accurate figures but it has been estimated that more of the American taxpayers' dollars have been sent to other countries as direct help to their fisheries during the past 8 years than has been spent to develop and protect our own commercial fisheries for the past 20 years.

Our group does not believe that the diversion of 30 percent of the import duties on fishery products from the hundreds of millions now being spent on agriculture would be more than a drop in the bucket or barely missed by that agency while on the other hand it would literally be a bonanza to the perpetually underfinanced Fish and Wildlife Service and permit that agency to do the job for which it was created.

We hope that the committee and the Congress will give the fullest consideration to this statement as well as to those of others who are here representing the fishing industry.

(The following telegram and statements were submitted to the clerk for inclusion in the record.)

ORLEANS, MASS., *March 29, 1954.*

CLERK, HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Subcommittee on Fisheries,
House Office Building:

Record Massachusetts Shell Fish Officers Association in favor of H. R. 7641 and H. R. 7671.

E. R. DARLING, *Secretary.*

STATE OF MAINE,
DEPARTMENT OF SEA AND SHORE FISHERIES,
Augusta, April 1, 1954.

CHAIRMAN, *Subcommittee,*
House Merchant Marine and Fisheries Committee,
Washington, D. C.

DEAR SIR: The fishery resource of the State of Maine is one of our major natural resources. The management of the fish harvest for several decades past has fallen below the standards of productivity that have long been established for agriculture and forestry.

It is unfortunate that there has been a failure to provide adequate expenditures for fisheries research and management. That such expenditures ore self-liquidating seems to have been overlooked.

Looking at this problem from its broader aspects, if we are to face the maintenance of our high level of national defense and huge governmental services, it becomes of greater necessity that every State resource should produce its maximum crop.

I consider it my duty and obligation as commissioner of the Department of Sea and Shore Fisheries of the State of Maine to do all in my power to protect, preserve and perpetuate the fishery resources of this State so as not to impair their supply. It is necessary that continuous studies and research be conducted to enable me to carry out my duties.

Although fishery research has made tremendous strides during the past few years, it is still not abreast of many problems facing it today. In reviewing the history of the Maine fishing industry, we find that "fishing" was at one time the foremost industry of the State; as the State developed it became less important to the economy, but still ranks third.

Maine was pioneered by fishermen; the colonists came afterward. Not only the maritime but the entire history of the State of Maine dates from the time of the "Winter Fisheries." The State of Maine since early history has been dependent on the fishing grounds of the Northwest Atlantic; some of these grounds are adjacent to our coast, others far at sea.

Since the dawn of history men have gone down to the sea to find their food. Primitive dugouts have given way to diesel motored trawlers; crude hand-woven nets have been replaced by huge windlass operated trawls. The fertility of the sea has always produced enough for our wants, and we thoughtlessly have supposed it will continue to do so. The trend of thought has been that "a fish is a fish" and the ocean stretches off to meet the sky—if fishing is not good in one place, it is sure to be alright in another. I think we all realize that nothing could be further from the truth.

Nature has provided man with a bountiful supply of resources to meet his every need. Wise men, even primitive men, knew that they must live in harmony with nature in order to survive. He knew that, if he violated nature's laws, he would perish just as surely as any other animal.

However, history records that, as man has become more civilized, he has neglected to realize at times that food and shelter and clothing, which are the basic needs of humans, still come out of the forests and fields, the waters, and the soil. In many instances, natural grounds of fish have been unthinkingly depleted or destroyed.

It is only recently that civilized man has become aware of the value of natural resources or has realized that an abundant life depends upon the preservation and intelligent use of these resources. Within the past few years, all nations have been taking inventory of their resources and have been trying to devise methods of restricting them. This, of course, includes fish resources.

The depletion of our fishery's abundance is not so dramatically portrayed as that of land animals or birds. Fish, for the most part, are unseen in their natural habitat—the oceans, bays, and rivers. We have judged their abundance by the catch. It is easy to visualize the havoc wrought on the buffalo herds or upon a seal herd under the fire of guns of many hunters, but to think that the fishes of the boundless sea might be seriously depleted by mere man seems incredible.

While the production by the American fisheries has increased, I would like to emphasize that this production has been maintained at high levels only by substituting new and, in many instances, less desirable species for old, by developing new market products such as packaged and frozen fillets, and by increased mechanization of methods of capture. Every expansion of markets, every technological improvement in methods of processing fish, and every increase in the efficiency of the methods of capture has intensified the strain on fishery resources.

These economic and technological advances are destructive to the very fisheries they seek to develop unless accompanied by effective controls, management and research.

The combination of overfishing, pollution, and construction of barriers preventing spawning, plus natural hazards, has seriously depleted our fishery resources. Many groups have studied this problem of depletion and some answers have been found, but an enormous amount of research remains to be done to come to conclusions that are satisfactorily definite.

For your information and perusal, I am taking the liberty of briefing you on some of Maine's more important fishery products.

1. Haddock

The chief source of the world's haddock is on Georges Bank off the New England coast. Over 90 percent of haddock landed in Maine ports are caught by trawlers which drag a large net along the bottom of the bank. Heretofore, these nets have not been selective but take everything in their paths not too small to escape through the mesh. This destroyed many small cod and haddock which later would have grown to marketable size. Throwing these small fish back overboard did no good because most were dead or dying when discarded. In 1 year alone it was estimated that $7 million worth of baby haddock were discarded on Georges Bank. Recently a larger mesh size has been adopted and fishing authorities believe that in 10 years' time the haddock production will be increased at least 50 percent by the larger mesh enabling the small fish to escape.

In order to further slow down the depletion of this fish, I would suggest that studies be instigated looking into the possibility of closed seasons and a minimum market size, better processing, packaging and marketing of fillets, and experimental dragging in waters adjacent to our eastern counties in search of new grounds.

2. Ocean perch

Ocean perch or redfish, known by fishermen in most countries as redfish is a comparatively new fish on the commercial market. Before the 1930's this fish was considered a "trash" fish and discarded. However, with the introduction of filleting and freezing the commercial value was appreciated and a demand for fillets came from the midwest, where even today 75 percent of the production is marketed and consumed.

In the space of 25 years the adjacent fishing grounds of Maine have become somewhat depleted and vessels are traveling farther off shore for their catch. Although, this is, as I have stated, a new product, some research should be done relative to the feasibility of closing certain nursery grounds and protection of the species during the spawning season.

3. Flounders

This is another species of groundfish, the production of which has decreased during the past few years. Partial studies indicate that this depletion is due to overfishing and changing migrating habits. Much research should be planned relative to the feasibility of a minimum size limit and a comprehensive study made of the flounder's migrating habits and natural history.

4. Cod

The catch of cod varies from year to year. The productivity of the North Atlantic fishery remains fairly stable, although the popularity of the fish has decreased somewhat. At present, I have no knowledge of any study being made of this species, but I believe much could be done to increase its popularity. This species should also have a comprehensive study made of it, both biologically and marketwise.

5. Whiting

There have been reports that this fish is becoming scarcer. There is, at present, an excellent market for whiting in the Middle West. No research is being conducted at the present time, to my knowledge, and little is known of the nursery grounds. Much research is needed on this species.

6. Pollock

The off-color meat of this fish holds back its marketing possibilities. The landings remain about the same from year to year and could possibly be increased if a larger market were created. Little is known about the habits or little biological knowledge is to be found on this fish.

7. Hake

There are two types of hake sold by New England fishermen. White hake, sold as a fish food and red hake considered a trash fish. This fishery could be expanded if a market were created. Not too much is known of its biology and population.

8. Mackerel

Mackerel is a migratory species, and the catch has fluctuated through the years. This is attributed to natural causes, but this has not been definitely substantiated.

9. Herring

Herring is a migratory fish with recurring shortages. The vast bulk of this catch is packed as sardines. The Maine sardine industry is very important to our economy. During 1953 the catch was extremely small. When there is a small pack the price jumps and retailers throughout the United States are inclined to drop this item from their shelves. The year 1954 may well bring a large pack and then there is a marketing problem. The lack of being able to predict the availability of herring is the most serious handicap of this industry. Packers do not know from day to day what they are going to have in the way of supply. Some in the industry fear that the promiscuous taking of herring less than 4½ inches long will mean the eventual extinction of this fish. Others feel just as emphatically that the resource is underfished. This is but one of the many questions that need an answer. Some study is presently being made relative to diseases in this fish. Much research should be done to learn the migratory habits and spawning areas of this species as well as new methods of catching.

10. Shad, salmon and alewife

These are considered the major anadromous fish and have been on the decline for years. The decline has been attributed to overfishing, pollution, and the prevention of the fish from reaching their spawning grounds due to lack of adequate fishways.

It is believed that the population of these three species could be increased materially by the addition of fish ladders and pollution prevention measures.

In 1873, 400,000 pounds of salmon were taken in New England; last year only a few hundred pounds and in only three rivers in Maine—the Narraguagus, Dennys and Penobscot. Some research is being done on these species at the present time, but much more should be done especially on pollution, stream improvement, spawning grounds, fishways, and survival studies. There is at present a salmon restoration program being undertaken by the Fish and Wildlife Service in cooperation with the Maine Atlantic Sea Run Salmon Commission, the Maine Department of Sea and Shore Fisheries, and the University of Maine.

11. Shellfish

Lobsters.—The lobster fishery of Maine ranks second in Maine and 80 percent of all lobsters taken in New England waters are caught in Maine. Production has increased through the years due to the demand for the superior northern lobster, although in 1953 production was off somewhat. Importation of foreign crayfish tails has more than doubled since 1940, and those imports combined with the domestic production of crayfish tails has created a highly competitive situation.

Depletion of Maine's lobster resource would have a serious effect on our economy. Catch per trap which had a peak in 1887 of about 175 pounds per year had fallen off to about 35 pounds in 1940 and is steadily decreasing.

To conserve the source, all of the New England States are enforcing minimum size limits and Maine also has a maximum size limit to protect large spawners. Considerable research has and is being done on the lobster, but further studies must be made.

Scallops.—Some research work has been done on the scallop by the Research Division of the Department of Sea and Shore Fisheries of Maine. To conserve these resources the State has enacted laws relating to open and closed seasons and is making studies on survival and growth.

Clams and quahogs.—There are two distinct types of clams produced in Maine—the soft shell and hard shell, or quahog.

(*a*) *Soft shell.*—There has been a steady drop in abundance of soft shell clams along the coast of Maine. Much study and research has been done by the Fish and Wildlife Service and the Research Division of the Department of Sea and Shore Fisheries of Maine. Biologists agree that pollution, excessive digging, and natural hazards such as green crabs have all contributed to this decline.

Many laws and regulations are on the statutes of Maine which were enacted to help prevent the depletion of this most valuable resource. Among them are:

1. Size limitations.
2. Digging limitations.
3. Quantity shipping out of State limitations.
4. Many State and local laws restricting digging. In some areas, there is evidence that these many restrictive "town clam laws" are actually detrimental to the industry.

Much research has been done on the following relative to clams:

1. Pollution.
2. Clam farming.
3. Clam flat digging rotation.
4. Transplanting.

Much more study and research must be done to save this industry. The Department of Sea and Shore Fisheries is now working on a new clam management program to submit to the Maine Legislature.

(*b*) *Quahogs.*—This type of clam is found in commercial quantities only in the Casco Bay area. It is much more hardy than the soft shell clam and has a good market demand. Experiments are being conducted to endeavor to transplant the seed to various parts of the coast from the Casco Bay area.

(*c*) *Mussels.*—There is an abundance of this shellfish along the Maine coast, but production is almost nil due to the lack of demand. While mussels are considered a delicacy in England and France, so far the consumer in this country has not shown any great interest in them. They are, however, rich in proteins and vitamins. Some research has been done to help the processor make this shellfish more appetizing, and the State of Maine is presently experimenting with smoked and pickled mussel. Much more research work could be done along food technology lines if funds were available.

I have endeavored to bring to your attention the most important fish and shellfish of the State of Maine. I have done this to attempt to show you that research and study of many varieties of our fish and shellfish is a complicated and costly procedure. Results of research of one species does not necessarily pertain to another. Each has its distinctive individual habitat and biological problems. The study of a species native to southern waters might, in a small way, help in understanding some of the problems connected with our northern fish but would not even attempt to solve the whole problem.

The research division of the Maine Sea and Shore Fisheries Department has carried on research and studies pertaining to the fish and shellfish of this section of the United States. Due to inadequate funds much that could be accomplished has had to be left undone. However, our accomplishments to date have paid dividends not only to Maine but to the fishing industry of other States. Some of the more important problems being worked on are as follows:

1. Fish

(*a*) *Smelts.*—A continuing long-range smelt investigation is at present being carried forward with emphasis on the effectiveness and results of spawning and utilization of stock.

(*b*) *Atlantic salmon.*—The Department of Sea and Shore Fisheries has aided in fish planting and thermal studies in the streams.

(*c*) *Alewife.*—Surveys and recommendations have been made to various towns interested in the establishment of alewife runs and to towns now having runs and wishing to improve them.

(*d*) *Shad.*—A continuing watch and study of existing fisheries and runs.

2. Shellfish

(*a*) *Scallops.*—Accumulation of data on life history and habits of this species and reports published on migration, meat yield, size frequency distributions, age and growth rates. Exploratory dragging has been done seeking new beds. Extensive natural sets of young scallops have been found.

(*b*) *Clams.*—Clam farming is being experimented with. Seed clams have been transplanted. Clam management studies are being made. Clams from polluted areas are being experimented with in a self-cleansing plant, conservation areas are established, and transplanting is being done from one area to another. An experimental suction device has been developed to take seed quahogs. Experimental laboratory rearing is continuing and work is being done on artificial culture.

(*c*) *Lobsters.*—Much research work has been done including tagging and information on natural history. Age and moult studies and study of diseases of lobsters is being carried on.

Many other projects are being carried on, some of which are:

(*a*) Research on artificial lobster bait.
(*b*) Midwater and bottom trawling.
(*c*) Studies of marine worms.
(*d*) Effects of pollution on aquatic life.
(*e*) Methods of control of green crabs.
(*f*) Experimenting with artificial sea water for holding lobsters.

Due to the diversification of the fishing industry, I believe that a substantial part of the proposed funds should be allotted to the various coastal States to set up a research program for their individual needs. While the Fish and Wildlife Service of the Department of the Interior has done very commendable work in various research fields, I believe their programs are too broad and cover too much territory to adequately supply the conclusions necessary, in most cases, to better the fishing industry of a specified area. As has been true in the past, I think it would also be true in the future that the policy of the Fish and Wildlife Service is to concentrate their research on a few species on a nationwide scale. It is my understanding that, at the present time, 50 percent of research being done in New England by Fish and Wildlife Service is on the soft-shell clam. This is of value as far as the clam producer is concerned but what about the other segments of the industry? By having additional research funds, each State could set up a program best suited to its needs. Each State's fishery problems are different and each State would have to approach them from a different angle.

The Fish and Wildlife Service should continue its studies of fish technology and basic fish biology; but each State could make studies relative to her individual problems such as pollution, methods of catching, industry problems, and conservation measures along with other difficulties peculiar to a particular area. State agricultural colleges, subsidized in part by the Federal Government do research work and give instruction on various crops but concentrate on and emphasize the crops of their particular area. At the University of Maine, much work and study is done on potatoes and the University of Florida emphasizes citrus fruit. To do otherwise would be foolish. The same should hold true of fishery products. Most research in Maine should be on Maine fishery problems, and should be conducted by the State.

It has been suggested by some that the fishing industry itself should sponsor more research, both in fish technology and processing. The industry in Maine is highly individualized and unorganized, lacking adequate funds to carry on this work. However, some outside sources have contributed to the State's research program. The Campbell Soup Co. of Camden, N. J., and the Blount Seafood Corp. of Warren, R. I., have contributed toward research on quahogs. The Maine Sardine Industry is contributing funds for research on diseases of herring. It is my opinion that, should the State have funds to set up a seafood technology program, many of the fishing and allied industries would cooperate and contribute; but, at the present time, no one industry or segment of any one industry has the means to initiate such a program.

In conclusion, I would like to quote from John Ruskin, "God has lent us the earth for our life. It is a great entail. It belongs as much to those who are to come as to us, and we have no right by anything we do or neglect, to involve them in any unnecessary penalties, or to deprive them of the benefits which was in our power to bequeath."

Granted that civilized man has destroyed much that was given him, it is not too late. All over the world scientific forestry is beginning to replace irresponsible lumbering. Scientific farming and conservation is playing an important part in the production of agricultural products. Man's experience with land has taught him finally that without proper management of basic resources the harvests dwindle to a bare subsistence. The same can be said of the fisheries. More intensive research is one way to increase the abundance of our fisheries and add to the moral, social, and economic well-being of our Nation.

Sincerely yours,

STANLEY R. TUPPER, *Commissioner.*

STATEMENT OF JAMES E. BARR

The commercial fishing of shrimp from Texas ports is a fast-growing industry. Concurrent with the growth, the past 5 years has seen the necessary capital investment for such fishing double. A 65-foot trawler completely rigged and ready to fish cost $25,000 in 1949. In 1953, the same vessel cost $44,000. Increase in the number of boats fishing has made it necessary that the fleet seek shrimp in more distant waters, which has been another cause of increased capital investment. Larger boats are needed for such fishing and larger boats cost more money. It is estimated that the industry investment in trawlers in Texas alone has hit the $25 million mark. Add to this figure another $10 million, the value of attendant installations such as unloading and processing facilities, trucks, repair shops, and so forth, the shrimp industry definitely assumes the proportions of big business.

It is the present concern of the industry that there is imminent danger of the shrimp resource of Texas being depleted from overfishing. Such an eventuality would certainly jeopardize their present substantial investments. Regulatory measures toward preserving the resource seem to be the answer to this problem. Before any constructive program of conservation can be advocated, there is the need of technological and biological data of a comprehensive nature so that the premises on w' ich such a program can be built will be authoritative.

There is no doubt in the mind of the industry that without a planned program for the shrimp fishery, its present productivity will start declining. It is the judgment not only of our own industry, but of other segments of the fisheries, that the general obscurity under which we operate, relative to species data, is not only a detriment to present operations, but poses a definite barrier to the promulgation of constructive as well as conservative plans for the future.

H. R. 7641 is a vehicle by which the fishing industry can be afforded relief in this matter. It is the opinion of our section of the industry that this legislation has been introduced as a remedial measure, with the problems of fisheries in mind, and therefore I have been instructed to offer the assistance of our industry in support of the legislation.

Mr. NORBLAD. I might announce that the meeting will now recess until 10 o'clock tomorrow morning. Any of you gentlemen who wish to make oral statements, we will be glad to have you.

(Whereupon, at 11:15 a. m., the committee adjourned.)

DISTRIBUTION OF FISHERY PRODUCTS

SATURDAY, APRIL 3, 1954

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
SUBCOMMITTEE ON SHELLFISH AND
SALT WATER FISHERIES,
Washington, D. C.

The subcommittee met, at 10 a. m., pursuant to recess, the Honorable Walter Norblad presiding.

Mr. NORBLAD. The committee will please come to order. We have a telegram from the Twin Cities Fishermen's Cooperative of Morgan City, La., endorsing the principle of this legislation, and it will be entered in the record at this point.

(The telegram above referred to is as follows:)

MORGAN CITY, LA., *April 2, 1954.*

MERCHANT MARINE AND FISHERIES COMMISSION,
United States House of Representatives,
Washington, D. C.:

We endorse principles of Congressman Bates bill for use of section 32 funds for fisheries.

TWIN CITY FISHERMEN'S COOPERATIVE.

Mr. NORBLAD. Outside of the Department witnesses, I understand we have only one witness who wishes to appear before the committee this morning, Mr. Wayne Waller, is that correct? Is there anybody else who wishes to appear?

Mr. STURGIS. I am appearing for Mr. Waller.

Mr. NORBLAD. You may proceed, Mr. Sturgis.

STATEMENT OF HOWARD STURGIS, DIRECTOR OF THE BYPRODUCTS DIVISION, NATIONAL FISHERIES INSTITUTE, WASHINGTON, D. C.

Mr. STURGIS. Mr. Chairman, and gentlemen of the committee, my name is Howard Sturgis. I am director of the byproducts division of the National Fisheries Institute, Washington, D. C. Those whom Mr. Waller represents feel that it is especially important that his statement be submitted to the committee because he brings out how heavily agriculture depends upon fisheries.

Inasmuch as this is Mr. Waller's statement, I shall read it in the first person as he would have presented it himself.

Mr. NORBLAD. Go ahead, Mr. Sturgis.

STATEMENT OF WAYNE M. WALLER, MANAGER OF THE BALTIMORE BRANCH OF H. J. BAKER & BROS.

Mr. STURGIS (reading):

My name is Wayne M. Waller. I am manager of the Baltimore branch of H. J. Baker & Bros., who are importers, exporters, and brokers of heavy agricultural chemicals, which are used by manufacturers of fertilizers and animal feeds. For the 3 years preceding September 1953, I was director of the byproducts division of the National Fisheries Institute with headquarters in Washington, D. C.

I own and manage a general farm in Iowa; consequently, I have a broad and intense interest in the fishing industry and in our agricultural problems.

About one-third of the catch of our United States fisheries is utilized by agriculture to enrich animal and poultry rations. Obviously, an adequate, continuous national research program for fisheries is in the interest of our agricultural industry.

The principal fishery feed products are fishmeal and fish solubles. They are the richest natural sources of certain essential proteins and B-complex vitamins available to feed manufacturers. In addition, they are known to contain unidentified growth factors essential for the most efficient utilization of other nutrients in certain poultry and swine rations. Briefly, the fishery feed products seems to act as catalysts which stimulate maximum growth and reproduction when incorporated into many rations.

The fishing industry markets its products without governmental assistance in the form of price-support programs or other Federal aid. I think it is significant that this industry has survived without the elaborate economic and technical assistance that has been extended to other basic producers of food. I also wish to point out that fishery products are not among the surplus food commodities which are today such a serious problem to agriculture, industry and Government.

The intensity of competition in the market place resulting from the fast tempo of modern research makes it imperative that every industry be served by a broad technological program. Our fishing industry is dispersed along 6,000 miles of coastline and, consequently, its problems are so diverse that the industry cannot be expected to operate and finance the economic, biological, and laboratory projects that are needed.

The Fish and Wildlife Service of the United States Department of the Interior has the specialized talent, some of the facilities and the experience to put into motion and carry out this research program. It is my considered opinion that financing an expanded fishery research program as is provided for in H. R. 7641 and related bills is a long overdue step in the right direction.

Mr. NORBLAD. Thank you, sir. Are there any questions, Mr. Bonner?

Mr. BONNER. I did not understand the witness' identification.

Mr. STURGIS. I am Director of the Byproducts Division of the National Fisheries Institute at this time. I am appearing for Mr. Waller, who was unavoidably detained in Baltimore today.

Mr. BONNER. You are speaking here primarily of fish for oil and fertilizers?

Mr. STURGIS. Primarily for feed, sir, rather than for fertilizer and oil.

Mr. BONNER. Stock feed?

Mr. STURGIS. Stock and poultry feed, yes, sir.

Mr. BONNER. Is that all-inclusive in the bill that is now before the committee?

Mr. STURGIS. The fisheries which are most important in that direction are fisheries such as menhaden, herring and sardines and they would be definitely be assisted, we trust, by research programs which would tell us far more about the habits, environments, and so forth, of this type of fish as well as of all of the edible fish from which we secure a considerable amount of these same materials, in other words from the waste of the edible fish.

Mr. BONNER. What effect does the taking of menhaden have on the coastal fishing for fish that have human food value?

Mr. STURGIS. I think I should leave that question to be answered by the experts on the subject and those members of the Fish and Wildlife Service who are here today.

Mr. BONNER. It is an interesting question to me, since, I take it, you represent what we generally speak about in common language as the fish factories producing fish oil.

Mr. STURGIS. The byproducts group, sir.

Mr. BONNER. Byproducts of fish?

Mr. STURGIS. Yes, sir.

Mr. BONNER. What caution do you use in the taking of fish not to include food fish in the menhaden catch?

Mr. STURGIS. I believe, sir, that the records, such as are available, indicate very clearly that the menhaden fishery, for instance, which is the biggest of our fisheries today, is conducted in such a manner that it is most unlikely that there would be more than a very small percentage of edible fish in with them. In the first place, I think it is true that very few edible fish travel normally with menhaden, and, therefore, the records indicate that very, very few are taken with menhaden.

Mr. BONNER. They are not, then, considered a food for other fish?

Mr. STURGIS. To some extent, probably. I cannot answer that question.

Mr. BONNER. That is all.

Mr. NORBLAD. Mr. Tollefson.

Mr. TOLLEFSON. You are interested primarily in the fish stocks which you use not being depleted?

Mr. STURGIS. That is exactly it, sir; yes, sir.

Mr. TOLLEFSON. And you mentioned sardine and pilchard.

Mr. STURGIS. Sardines, and I was thinking of pilchard, the Pacific sardine, of the pilchard and herring from the Northwest, herring from the Northeast, and menhaden. Those, of course, are the three biggest groups.

Mr. TOLLEFSON. And the herring has been going down in the amount that has been taken; is that true?

Mr. STURGIS. Yes, sir; it certainly has been true recently.

Mr. TOLLEFSON. They are both down in California and up in Alaska also.

Mr. STURGIS. Yes, and I think recently in Maine also. They have a number of biological problems which they need assistance on.

Mr. TOLLEFSON. And your people will be interested in rehabilitating the stocks which are disappearing?

Mr. STURGIS. Exactly.

Mr. TOLLEFSON. That is all, Mr. Chairman.

Mr. NORBLAD. Mr. Magnuson.

Mr. MAGNUSON. I have no questions, Mr. Chairman.

Mr. NORBLAD. Thank you very much, Mr. Sturgis.

Mr. STURGIS. Thank you, sir.

Mr. NORBLAD. In view of the fact that this committee had so much talk and discussion yesterday with reference to North Carolina and Massachusetts, it is a pleasure to call as our next witness Mr. Arnie Suomela, of Oregon.

STATEMENT OF ARNIE J. SUOMELA, ASSISTANT DIRECTOR FISH AND WILDLIFE SERVICE, UNITED STATES DEPARTMENT OF THE INTERIOR, WASHINGTON, D. C.; ACCOMPANIED BY LIONEL A. WALFORD AND ANDREW ANDERSON.

Mr. SUOMELA. Mr. Chairman and gentlemen of the committee, my name is Arnie J. Suomela. I am Assistant Director of the Fish and Wildlife Service. Because of the uncertainty of Director Farley's return to Washington from Alaska, he had asked me to present this statement.

There are present at the meeting today two members of the staff who are chiefs of sections and who are primarily directing the investigations covered in the statement, Dr. Walford, Chief of the Branch of Fisheries Biology, and Mr. Andrew Anderson, Chief of the Division of Commercial Fisheries.

This statement has been filed with the committee for the record, and with your permission, Mr. Chairman, I would like to read it.

The Department of the Interior is keenly interested in the objective of the programs of assistance to the fishery industries of the United States as outlined in H. R. 4303, H. R. 5829, H. R. 7441, H. R. 7641, and H. R. 7671. This objective is stated rather simply in the bills as "the free flow of domestically produced fishery products in commerce." As with any industry, continuation on a successful and profitable basis requires at least two primary ingredients: First, a stable source of raw materials, in this case catchable fish, and second, a stable market for the products of the industry. We favor the objective of the bills because we know that our fishery resources are an essential segment of the economy of the United States and also because we know that our fishery industries presently are in a precarious position. I need not tell you that fish is one of our finest protein foods, but few realize that the retail value of domestic fishery products in the United States is more than a billion dollars annually.

Each year at ports of landing along the Atlantic coast fishermen realize $140 million from their catches. At ports along the gulf coast these catches are valued at $64 million; along the Pacific coast, at $97 million; in Alaska, at $39 million; and, on the Great Lakes, at $21 million. The total value of these domestic landings is $361 million annually. At the same time, the declared value of fishery imports is $240 million a year.

The fishery industry of the United States is made up of numerous independent operations, many of which are conducted wholly by one or more individuals. As such, it is difficult and in many instances impossible for the industry or a segment thereof to undertake activities which are essential to the welfare of one or more phases of the industry or the industry as a whole. For many years the Department of the Interior has carried out such programs and activities for the benefit of the commercial fisheries, as well as the consumer, which activities could not have been assumed by the industry itself. This is particularly true in the fields of biological and technological studies and marketing.

While many of our unsolved fishery problems are of long standing, they unquestionably have been accentuated by recent substantial changes in the import-export situation. For every 10 pounds of fish caught, processed, and distributed as a domestic product, 7 pounds

of foreign-caught fish also are made available to the domestic trade. This competitive situation has grown rapidly in the last few years and has affected most seriously the New England ground fish fillet industry, the Great Lakes fresh fish producers, the gulf and South Atlantic shrimp fisheries, the Pacific coast tuna industries, and the fishmeal industries on all of our coasts. While imports of foreign fishery products have climbed steadily, our fishery export trade has declined.

Mr. NORBLAD. As a matter of fact, in the Pacific Northwest, as one example, the bottom fishing fleet has almost completely gone out of business.

Mr. SUOMELA. That is correct.

Even the increasingly serious competition of foreign fishery products, many of which are subsidized by foreign governments, might not be as serious if wide fluctuations in the size of the domestic catches did not result in serious losses of markets and other dislocations. These variations which occur seasonally and annually in our domestic production lead, of course, to marketing problems. Certain things can be done to correct or offset some of these wide fluctuations and to strengthen a dependable market for fishery products.

Perhaps it would be well to outline the existing activities of the Federal Government in this field so as to indicate in turn the needs for expansion of its activities.

Seldom is it possible to develop a stable market for any product if there is no continuous supply of the product to the wholesaler, retailer, and consumer. Such a continuous supply of products depends, again, on a reliable source of raw material going into the product. Wide fluctuations in catchable fish have from time to time caused serious losses of both domestic and foreign markets. Some of these wide fluctuations may be offset, at least, if we know the reason for the fluctuations and can predict in advance the probability of a decline in a particular species.

Most of our biological research problems have been started under the pressure of bad situations affecting particular fisheries. A sharp decline in total catch might be the occasion for a new program as was true in the case of the haddock fishery in the late 1920's; or a fishery stock might disappear from the fishing grounds as was true of the Pacific sardine in 1947; or it might be an invasion by a new predator that had not formerly affected the fishery stocks as was true when the sea lamprey invaded Lakes Huron, Michigan, and Superior; or there might be a mass mortality of fish as was true on the west coast of Florida this year; or there might be a competition between two kinds of fishing gear engaged in a common fishery as was true in southern New England in 1870. This last controversy was the occasion for the founding of the United States Fish Commission.

Most fishery research programs have not been able to get underway until the particular situation has run its course and then it is too late to reconstruct what happened. The programs, however, have continued because other problems have arisen, other particular situations have developed.

It is characteristic of fishery stocks all over the world that their abundance, availability and well-being change constantly. Consequently, fishery industries are characteristically unstable. This is the problem which dominates all fishery stocks. Most biological research programs are directed to understand the causes of these

fluctuations in order to explain them and predict their occurrence and to use such understanding for the benefit of the fishing industries. To achieve this understanding for many kinds of fishery species, certain things must be known about them. They differ enough in habits, migration patterns, distribution, responses to environmental conditions, etc., and therefore management for conservation purposes must take each stock into account separately. So, it is an essential part of our fishery programs to determine the most profitable fishing rates, and to do that it is necessary to learn the rates of growth, reproduction, and mortality. It is necessary also to study the currents, the chemistry of the water, and to record the changing marine climate; for all these things affect fishes for good or bad.

In theory, a fishery agency should study every important fishery species. It should not be necessary to wait for a disaster before starting research about the Nation's food resources. Ideally, we should know enough about these resources so that disasters would not occur, or if they are unavoidable, we should be prepared to warn the people of the fishing industries before the effects of such disasters are felt and we should be able to advise them where best to redirect their efforts during the lean years. This is theory. In practice the situation is quite different. About 35 kinds of fish and shellfish each are worth a million dollars or more a year to American fishermen. As a result of State and Federal research efforts, there is satisfactory information on less than half a dozen.

The Fish and Wildlife Service carries on biological research about commercial fishery species throughout the country. In the North Atlantic area, we have a laboratory at Woods Hole, Mass. Last year, as a result of long study, we recommended through the International Commission for the Northwest Atlantic Fisheries, a regulation on size of meshes in the nets used by fishermen. In addition to the conservation effects of this measure, the New England haddock fishery is making more money at the rate of $1 million than would have been possible without the regulation. Now, we are giving increased attention to the ocean perch which is about as important in point of tonnage as haddock. The ocean perch is a much more difficult species to study than haddock. It is a very slow growing, slow-maturing fish and probably composed of many localized stocks. So far the problem of tagging redfish to study their routes of migration and other features of biology remains unsolved. The research program on this increasingly important species must be intensified considerably in order to be fruitful. Other valuable fishes of the Atlantic coast about which we know very little are the menhaden, the whiting and sea scallops.

The plan of work in the South Atlantic area has been to study the oceanography out into the Gulf Stream to measure the total productivity of the fishery resources. Here we have based our design of research on the proposition that the distribution and abundance of young fish and eggs are highly correlated with distribution and abundance of spawning adults. We have carried on hydrographic studies in close collaboration with the Hydrographic Office of the Navy and the biological studies in collaboration with fishery agencies of the Southern States.

Along the whole Atlantic coast during the past 4 years we have been studying the shad fisheries in collaboration with all of the Atlantic States. Our plan of research here has been to concentrate in particular

localities beginning at the Connecticut River and working south. We have found all along the way that the decline in shad fisheries is a consequence of overfishing and have applied the results of our studies in recommendations, through the Atlantic States Marine Fisheries Commission, of regulations for restoration of this valuable resource. In the Gulf of Mexico, we have measured productivity of the offshore waters. As a result of our studies it is clear that the principal fishery wealth of the Gulf of Mexico lies in the stocks of shrimp and menhaden and that the key to the productivity of these stocks lies in the fertility of the complex system of sloughs and bayous of the gulf. We are now concentrating our present studies in those areas.

We have a small laboratory in Florida where we are studying the mechanisms relating to the sporadic outbursts of the microbe which causes red tides. This work started following a red-tide outbreak in 1947. Here is an example of research beginning after a disaster occurred. Here, by experimental methods, we are determining the chemical elements involved in red-tide outbreaks; and by continuous patrol of the affected areas we will be able to observe a red tide early enough to attempt corrective measures.

On the Pacific coast, we collaborate with States, the Province of British Columbia, and with the University of California in studying the Pacific sardine. Here is an example of research which began early. But the fishery mushroomed while the research remained on too small a scale. Thus, when the sardines virtually disappeared in 1947, there was not sufficient knowledge to explain the event. The heart of the present program is the study of coastal oceanography and the survey of spawning grounds to measure the abundance of spawn. The idea back of this work is that the location and abundance of the newly spawned eggs indicate the location and abundance of adults. One of the most valuable, though unexpected, byproducts of this study has been the discovery of other species of fish whose abundance had not been previously appreciated. For example, there is good evidence of very large stocks of hake along the coast of southern California. Whether this species had occurred there in previous years we do not know, but certainly there is a very great untapped resource ready, should use be found for this species. Again, it was found that the jack mackerel, a valuable species used for canning, ranges very much farther at sea than had heretofore been realized. There is a need for an extension of the Pacific program to the northward to expand knowledge about the far-migrating fishery stocks which are apparently interdependent, particularly the mackerels, anchovies, and jack mackerel.

The Great Lakes is an example of research that was impelled by a disaster. Here we have concentrated our attention in recent years to the problem of controlling the sea lamprey, a parasitic fishlike animal which invaded the lakes from the sea and by now almost completely destroyed the formerly valuable lake trout resources worth millions of dollars and supplying aliving to hundreds of fishermen. This is also an example of a successful piece of fishery research because we have determined exactly how to rid the lakes of this pest. The program depends upon installing an electrical barrier across every stream which lampreys must ascend to spawn. This will cost about one and one-half million dollars.

From Hawaii, we are doing something on a program different from our other biological studies. Here we are exploring in the central

Pacific for untapped fishery stocks with the aim of establishing a new American industry. We began by carefully analyzing the system of currents of the mid-Pacific in order to locate the most fertile areas. These studies led to exploration of the equatorial zone where according to prediction we found waters rich in fish food. Then, by experimental fishing, we found sufficient tunas to encourage American industry to make fishing trials which are now in progress. This year the Fish and Wildlife Service team working from Honolulu extended their studies north of the islands and discovered offshore stocks of albacore, the valuable white-meated tuna.

Perhaps the most difficult of all our research and the most poorly supported, considering the size of the problem, is that for Alaska. The work here is devoted to determining the effects of fishing on productivity of the stocks of salmon and to measuring the effect of changing stream conditions on their survival, both in fresh water and in the ocean. What makes the study of Alaska salmon difficult is that there are many rivers; each river contains more than one species of salmon; for each species there are several runs. Thus, each river must be studied separately and at the same time all rivers must be considered together. This we have attempted to undertake for many years on a scale adequate for one river.

All our salmon research work has been conducted in the rivers but the river is the environment of salmon during only part of its life. Our knowledge about the marine existence is a complete blank but recent evidence discloses that a very important part of the mortality of salmon occurs in the ocean, and this must be measured and understood in order to design a rational program of management of the returning runs.

Other activities of the Fish and Wildlife Service are perhaps more directly concerned with utilization of fishery products, i. e., the development of markets.

As an example of what can be done to increase markets for fishery products is the program carried on for a number of years for the introduction of fish and shellfish into the national school lunch program. All of this program has been financed out of the $100,000 transferred annually by the Secretary of Agriculture under the provisions of the act now proposed to be amended. Presenting children with two ounces of properly prepared fish as the protein portion of their lunches has done much to acquaint the children as well as their families and friends with the desirable properties of fish.

The Fish and Wildlife Service does not supply nor does it prepare the fish for school lunches. Its home economists develop suitable recipes for reasonably priced fish and then in company with a fishery marketing specialist and in cooperation with the Department of Agriculture, the economist conducts a fish cookery demonstration or demonstrations before groups of school lunch supervisors. Although almost 800 of these demonstrations have been conducted, only about 13 percent of the schools in the United States have been covered to date. On the side of results, later surveys of the use of fish in school lunches shows an average increase of up to 80 percent as well as instances where fish dealers have started special delivery routes to serve school customers.

Large institutional users of food products and cold-storage locker plants also have been found to be potential markets for larger quanti-

ties of fish once the availability of supplies and similar problems have been overcome.

An indirect and longer-term approach to developing or increasing markets is through the educational film on fishery subjects. A number of these films have been produced and distributed with gratifying results. The fishing industry finances the cost of making the film and the necessary prints. The Fish and Wildlife Service acts as producer and supervises the distribution through its own facilities and those of over 60 cooperating film libraries. Several of the films have won international recognition and there have been over 400 showings on television stations.

Technological research is carried on at four laboratories. In Ketchikan, Alaska, the joint Territorial-Federal laboratory devotes itself primarily to work on problems which will fully utilize Aalska's fishery products and byproducts and, if possible, extend off-season fishing and processing operations.

The Seattle laboratory conducts basic research on the cold-storage life and composition of fish; the chemical and physical properties of fish proteins; the vitamin content and nutritive value of byproducts; and an investigation of new uses for fish oils.

The College Park, Md., laboratory is conducting fundamental research on the vitamin content and nutritive values of fishery products; preparing a reference manual on the freezing of fish; and attempting to extend the market for a semiliquid fishery animal feed by developing a dry product.

The Boston laboratory operates a commercial fishing trawler in conducting tests of freezing fish in the round at sea for later thawing, filleting, and refreezing on shore. Results of the tests will show if the vessel operators can secure full loads of top-quality fish, save the byproducts, and eliminate the processing and labor problems on shore caused by irregular landings.

Technological research is a well-accepted means of developing markets. The studies mentioned accomplish this objective in various ways. Some, like the research on fish oils, open new markets by pointing up more effective uses for unique, but unutilized, properties of the product. Similar research on the composition, vitamin content, and nutritive value of fish expands present markets by drawing Attention to these attributes, thereby making fishery products more competitive. Research on the chemical and physical properties of fish proteins uses a slightly different approach. These studies lead toward changes in processing techniques and storage methods, and, ultimately, to a better prepared and better preserved product for more discerning markets.

Exploratory fishing is carried on primarily from bases at Seattle and at Pascagoula, Miss. The Seattle vessel has opened new trawling grounds off Washington and new shrimping areas in Alaska. Currently, it is exploring Prince William Sound in Alaska, seeking possible trawl-fishing grounds for local residents affected by the closure of salmon areas.

The Pascagoula vessel discovered several new shrimping areas in the Gulf of Mexico. It has fished experimentally for a newly located source of tuna, and discovered a supply and ready means of capture of bait fish for tuna fishing. At present, it is seeking new fishing grounds for shrimp in the gulf.

Most fishery marketing ills grow out of erratic production patterns. Irregular production in the fisheries is a natural result of the unpredictability of the size of the catch. Productivity of new grounds can help to smooth out low production in presently hard fished areas. Where rich new grounds have been located off the Pacific Northwest coast by direct exploration, the landings of just one species from a part of this area has added over $100,000 to the fishermen's income, and helped to stabilize the market for this fish. A full knowledge of the kinds of fish available in the waters accessible to our fishing fleet also produces the necessary flexibility in supplying the market with the types of fish that are in greatest demand at a given time.

Statistical information is the basis of most fishery research. It is of great importance to State and Federal agencies in their regulatory work, and, of course, invaluable to the fishing industry in all its operations. Monthly and annual statistics on landings, fishing gear, employment, processing, storage, and so forth, are collected and compiled by statistical agents stationed in a number of fishing areas throughout the country. Even with the aid of State data and industry cooperation it has not been possible to collect complete data for all areas each year. Nor has it been possible to issue the statistics as promptly as everyone wishes.

Market News Service information consists of data on landings, receipts, shipments, prices, cold storage holdings, and imports, together with news of current developments in the domestic and foreign fisheries. This information is collected and published in a daily report in each of 7 offices located in fishing ports or market centers—3 on the Atlantic coast, 2 on the Pacific coast, and 1 each on the gulf and Great Lakes.

The Fishery Market News Service, like the similar service provided farmers by the Department of Agriculture, is very useful judging from the comments of the recipients of the daily mimeographed reports. These reports provide market information on the same deadlines as a newspaper, and perform a valuable function as a factual source of information and a market stabilizer.

The Market News Service's perennial problem is its inability to fulfill the requests for more detailed information, and for new types of information occasioned by changes in processing methods and shifts in distribution channels.

As indicated earlier, the import-export situation has accentuated many of the problems of the fishing industry. The exact nature of the fishery products, both import and domestic, changes rapidly from time to time and as a result, existing tariff provisions do not adequately prevent sudden influxes of new products under rates intended to apply to other situations. These situations are studied by the Economics Section of the Fish and Wildlife Service for the purpose of recommending appropriate readjustments.

Thank you.

Mr. NORBLAD. Thank you, Mr. Suomela, for a very comprehensive and excellent statement.

You talk about the other States cooperating. How many States do have research projects where you people work with them?

Mr. SUOMELA. Starting from the west coast, in the three States on the west coast they are cooperating with us in fisheries research work.

I am not too positive as to the number on the Atlantic coast, but perhaps Dr. Walford could answer that question.

Dr. WALFORD. The amount of support given to fisheries research by the different States on the Atlantic and gulf coasts varies quite widely. Some of the Atlantic Coast States do not have any fisheries research agencies, but those which do have cooperate with us, and we with them.

Mr. NORBLAD. Is it of material assistance to your program?

Dr. WALFORD. Yes; indeed it is. It is essential to our program. This is true also in the Great Lakes States. The Great Lakes States also carry on a certain amount of fisheries research, and we cooperate with them.

Mr. NORBLAD. How much gross has been spent in your Department on this research work that we have been discussing here?

Mr. SUOMELA. It totals a little less than $3 million for both the technological and biological work.

Mr. NORBLAD. And under this bill another $1 million would be added; is that correct?

Mr. SUOMELA. I believe that is correct.

Mr. NORBLAD. How much, if any, are you getting from the Department of Agriculture at the present time?

Mr. SUOMELA. At the present time the figure amounts to $175,000.

Mr. NORBLAD. From what other source do your other funds come; are they all appropriated?

Mr. SUOMELA. Yes; all appropriated.

Mr. NORBLAD. They are all appropriated funds?

Mr. SUOMELA. Yes, sir.

Mr. NORBLAD. Under the present law, do you know how much Agriculture could transfer to you under the limitation?

Mr. SUOMELA. That would be 30 percent, I believe, set aside from duties collected on the imports of fisheries products.

Mr. NORBLAD. That is, under the present law, not under this bill?

Mr. SUOMELA. No; that is under the proposed bill.

Mr. NORBLAD. Under your present operations, how much can the Department of Agriculture transfer to you for this purpose?

Mr. SUOMELA. I believe that is a set amount, $175,000.

Dr. WALFORD. That is correct.

Mr. NORBLAD. Is it not a fact that in the amount of money used by Agriculture of these funds that the ratio is much higher for agriculture than for fisheries?

Mr. SUOMELA. It appears so, yes, sir.

Mr. NORBLAD. If this bill did become law you would be able to just double the work that you are doing at the present time. Is that a fair statement?

Mr. SUOMELA. I would like to say this, Mr. Chairman, that I do not think that we could double the work under the Fish and Wildlife Service, but it would certainly be our intention and policy to enter into contracts, or enter into cooperative work with colleges or with institutions, so that we would be able to carry on particular phases of the research.

Mr. NORBLAD. The University of Maryland and the University of California as examples?

Mr. SUOMELA. Yes. Certainly it would extend some of the program of the Fish and Wildlife Service.

Mr. NORBLAD. If you had twice the sum that you now have?

Mr. SUOMELA. Yes.

Mr. MAGNUSON. Mr. Suomela, I notice the amount of $3 million was mentioned. Is it not true under the Bates bill, what would be allocated would be the 30 percent of the gross receipts from the duties collected under the customs laws? One of the bills here asks for $3 million. Do you know how much it would be under the 30-percent formula?

Mr. SUOMELA. May I refer that to our legal counsel?

Mr. NORBLAD. I understand that the import fees last year were somewhere near $11,500,000, and it would come out almost the same.

Mr. SUOMELA. It was about $12 million, I think.

Mr. NORBLAD. It would come out to about $3,500,000.

Mr. MAGNUSON. The two bills are reasonably comparable?

Mr. NORBLAD. That is right, except that there is a difference in formula. I think that Mr. Bates' bill has the 30-percent feature.

Mr. TOLLEFSON. I was interested in what you said on the several fisheries.

You mentioned the shad problem.

Do you recall the percentage of the depletion of shad in the Chesapeake Bay? Do you have any figures on that? The reason I inquire, I had a recollection of a statement made by a Maryland fisheries representative a few years ago, to the effect that the shad fisheries in the Chesapeake had depleted as much as 80 percent, or some such figure.

Mr. SUOMELA. I believe that Dr. Walford has some figures on that.

Mr. NORBLAD. May I interject to say Mr. Suomela has been in the Department only for the last 2 months, so he would not know all the facts.

Dr. WALFORD. As I recall the figures, it is a depletion between 70 and 80 percent; that is correct, and our staffs have already determined measures to restore those stocks, and have made appropriate recommendations to the States.

Mr. TOLLEFSON. Was any of that depletion caused by pollution in the Chesapeake Bay? Mr. Suomela, I think, did not mention pollution.

Dr. WALFORD. We have no evidence that pollution was a primary cause of the depletion there. It certainly was in the Delaware Bay area, in the Delaware River, but in the Chesapeake Bay it was essentially overfishing, according to the results of our studies.

Mr. TOLLEFSON. Then I was also very much interested in what Mr. Suomela had to say about the lamprey eel. Do you feel that you have found a solution to the problem?

Mr. SUOMELA. For the eradication of the eel, yes; we feel that we have found the answer to it.

However, there remains much to be done on the rehabilitation of the fishery itself; that is, to try to reestablish the stocks of lake trout. One of the big problems now certainly is for research for the rehabilitation of the fisheries.

Mr. TOLLEFSON. I was also interested in your comment on the work done on the tuna fishery research program in the Pacific. That work was done, as I understand it, largely as a result of the so-called Farrington bill, which this committee approved a few years ago.

Mr. SUOMELA. That is correct.

Mr. TOLLEFSON. I do not believe that our committee has ever had a report back on the operation of that research. I am very much interested to learn that it has proved profitable, shall I say?

Mr. SUOMELA. Very much so, Mr. Tollefson.

Mr. TOLLEFSON. Did I understand you to say now American fishermen are beginning to go down in that area?

Mr. SUOMELA. Yes. There are two American interests in the island groups now.

Mr. TOLLEFSON. What islands? I heard the name of the islands at one time.

Mr. SUOMELA. They are fishing at the present time around Christmas Island, and also around American Samoa.

Mr. TOLLEFSON. Without going into it, do I understand we are having a little trouble around Christmas Island?

Mr. SUOMELA. Apparently they are in difficulty.

Mr. TOLLEFSON. Some international problems?

Mr. SUOMELA. Yes.

Mr. BONNER. I was greatly interested in this eel business in the lakes. You say that you have found a way to eliminate the eel. Have you sufficient funds to carry forth the work that is necessary to eliminate the eels?

Mr. SUOMELA. No, sir. Sufficient funds are not available.

Mr. BONNER. You say you spread electrical wires across the spawning areas?

Mr. SUOMELA. Yes.

Mr. BONNER. So then if you find out what the trouble is, and you cannot get the funds with which to do the work, then it is a waste of time to carry on the work discovering what the difficulty is unless Congress, through the Appropriations Committee, will appropriate the funds to carry on the work.

Mr. SUOMELA. That is correct.

Mr. BONNER. Senator Potter, who was a splendid member of this committee when he was in the House, was greatly interested in this subject. I think your testimony here today would be of great value to him.

Mr. SUOMELA. Yes.

Mr. BONNER. I know his continued interest goes on. Have you tried to get the proper funds from the Appropriations Committee?

Mr. SUOMELA. That is under discussion at the present time, Congressman.

I might say, too, gentlemen, that Director Farley had a meeting with Senator Potter yesterday, or the day before yesterday, on this very same problem.

Mr. BONNER. I thank you for that.

Now, about the shad in the Chesapeake, you found out the problem. Is the Fisheries Commission of Virginia and Maryland cooperating in your recommendation?

Dr. WALFORD. Yes, they are. Under the auspices of the Atlantic States Marine Fisheries Commission, the various States are cooperating.

Mr. BONNER. Have they invoked such regulations?

Dr. WALFORD. I can't answer that, as to whether they have already voted.

Mr. BONNER. I mean invoked the regulations, or passed State laws——

Dr. WALFORD. No; they have not.

Mr. BONNER. That carry out your suggestions?

Dr. WALFORD. I do not think they have yet, Congressman, because we have made these recommendations only within the last year. I do not think their legislatures have had time to act upon them yet.

Mr. BONNER. Does their department of fisheries have the authority to issue such regulations without State law?

Dr. WALFORD. I do not believe so.

Mr. BONNER. Well then, again it does not accomplish much if the Federal Government spends the money to develop the cause of the depletion unless the States cooperate.

Dr. WALFORD. That is true. If they do not, but I really think that they are going to cooperate.

Mr. BONNER. The reason that I bring this out, there is no spirit of criticism in your work, but unless the States cooperate in this effort we do not accomplish anything.

Dr. WALFORD. That is quite true.

Mr. NORBLAD. Mr. Suomela, before we get off the subject of tuna, have the research studies in the Pacific Northwest given any indication at all why the tuna runs fluctuate so violently out there? I am not speaking with reference to the Hawaiian Islands and that group; I am talking about off the Columbia River and Puget Sound.

Mr. SUOMELA. I believe the work carried on under the study of tuna in the Hawaiian group is certainly applicable to the very problem you are speaking of, the violent fluctuations in the tuna of the Pacific Northwest. It appears that the movements of the tuna are governed by ocean currents and the oceanographic characteristics which hinge upon meteorological conditions, and the nutrient of the ocean—that is, food. Through that very study the POFI investigations discovered the albacore stocks 800 miles north of Hawaii. So, with the continuing study, I think that it can be applied to other parts of the ocean.

Mr. NORBLAD. I may say for the benefit of the record, and you can correct me if I am wrong, that tuna appeared off the Pacific Northwest Coast some 15 years ago approximately. Large canneries were built and industries were founded based upon the tuna, and all of a sudden they disappeared. They would come back periodically. The canneries are standing by idly because of a lack of research. We do not know the reason for it. The industry and the fisheries could not anticipate what would happen in the future, and there are millions of dollars tied up in it. Because of a lack of research, we do not know what should be done in the future; is that right?

Mr. SUOMELA. That is right. You will recall in 1942 there were some 23 million pounds landed in Oregon alone, and in the next year it was a very small poundage that was landed.

Mr. NORBLAD. I think last year they did not catch enough to warrant opening a cannery. Next year we may have a tremendous influx of tuna.

Mr. SUOMELA. That is right, sir.

Mr. BONNER. May I get back to the shad question again?

In addition to the Chesapeake area, that study comprises the adjacent areas, does it not?

Dr. WALFORD. Yes. We have worked all along the coast, beginning with the Connecticut River and working clear down to Florida. We have a team that is large enough to study just one relatively small area at a time, one river system, so they began north and have gradually moved south as they have completed their work.

Mr. BONNER. What areas have you completed your studies in?

Dr. WALFORD. We are now down as far as the Meuse River in Florida, and have completed our work down to there.

Mr. BONNER. You have completed the study from the New England States to Florida?

Dr. WALFORD. That is correct, yes.

Mr. BONNER. And does the situation in other areas hold true as it does in the Chesapeake area? Is it similar?

Dr. WALFORD. It is different in the North. In the North pollution has been a more important factor than it has been in the more southerly rivers. We have had difficulty in the South because we have not been able to get the necessary records of past catches, and therefore our work has consisted of demonstrating what kind of records must be maintained in order to establish a basis for future regulations. We were very lucky in the Chesapeake in getting quite good record of previous catches.

Mr. BONNER. I ask you particularly about North Carolina. Have you finished the studies of North Carolina waters?

Dr. WALFORD. Our study is centered in North Carolina. That is where the laboratory is located.

Mr. BONNER. At Buford?

Dr. WALFORD. Yes.

Mr. BONNER. And your findings for the North Carolina waters were the same as those for the Chesapeake area?

Dr. WALFORD. Yes.

Mr. BONNER. Overfishing?

Dr. WALFORD. Overfishing. This seems to be one example where overfishing is very clearly responsible for the diminution of the fisheries.

Mr. BONNER. You reported that to the department of fish and wildlife in North Carolina?

Dr. WALFORD. We reported it through the Atlantic States Marine Fisheries Commission, and they in turn to the department in North Carolina.

Mr. BONNER. Do you know when that recommendation was made?

Dr. WALFORD. I do not, sir.

Mr. BONNER. Will you kindly supply it for the record at this point?

Dr. WALFORD. I will, yes.

(The information requested is as follows:)

SUMMARY OF SHAD RESEARCH, 1950–54, CONDUCTED BY THE FISH AND WILDLIFE SERVICE

Shad (*Alosa sapidissima*) production along the Atlantic coast of the United States has declined from 50 million pounds in 1896 to 8 million pounds in 1950. Because of this great decline of a valuable fishery resource the United States Fish and Wildlife Service as the primary research agency for the Atlantic States Marine Fisheries Commission began a study of this species in 1950. The specific aims of this project were to discover the underlying causes of the decline, to determine conditions favoring recovery, and to provide basic information for proper scientific management of the fishery to obtain maximum sustained yield. Work was begun in the Northern States and each season the emphasis of work was shifted southward as finances and personnel permitted. At the present time preliminary work has been completed in the State of Maine, in the Connecticut, Hudson, and Delaware Rivers, Chesapeake Bay, Neuse River in North Carolina, and St. Johns River in Florida. Work is now in progress in Georgia and will be undertaken in South Carolina next season. In each area recommendations have been made which will either bring about increases in abundance of shad or will supply information needed to determine the conditions of the shad runs.

In the State of Maine it was determined that the disappearance of shad from the rivers and streams was almost entirely a result of their exclusion from spawning areas by dam construction. Pollution is also a serious factor in some cases. A removal of pollution and fishways where justified will help shad production in this area.

Studies on the Connecticut River were greatly enhanced by the catch records and records of the number of nets fishing each year which have been collected by the State board of fisheries and game for many years. By determining the total population entering the river during the year of study, using the tagging method, it was possible to calculate from the State board's data the total run entering the river each year since 1935. It was then possible to study various factors which might affect shad production. Catch records alone are of little use for this purpose since the catch depends not only on the number of shad present but also on the number of fishermen or nets fished. Many factors were studied, but the only one showing any effect on population size was the number of shad allowed to escape the fishery and spawn each year. It was recommended that fishing effort be kept below 57 percent so that the number of shad spawning will increase. This recommendation was followed and the results already are encouraging.

The studies on the Hudson River were also very successful because catch and effort data were available from the States of New York and New Jersey. Pollution is severe in this river and pollution abatement is badly needed to increase the quality of fish found in this stream. Using similar methods to those employed on the Connecticut River it was found that adequate escapement from the fishery was necessary to increase the size of runs. From the studies in both the Connecticut and Hudson Rivers it was determined that a large number of shad bound for these rivers are caught in the ocean off the coast of New Jersey and Long Island. It was recommended that statistics on these fisheries be obtained. The States concurred with these findings and are taking steps to carry them out.

The problem on the Deleware was somewhat different. The shad fishery on this river is now nonexistent since pollution in the Philadelphia area has almost exterminated the shad run. Rehabilitation of this run is virtually dependent upon the activities of the Interstate Commission on the Delaware River Basin (INCODEL). Our research was centered on determining present spawning and nursery areas, time of migration of adults and young, and amount of pollution dilution needed for survival of the species. These data were obtained and are necessary to work out proper utilization of the resources of this river in connection with its future development.

Chesapeake Bay as a whole was studied during one season. The State of Maryland has a fisheries statistical department which compiles catch and effort data on shad. We were able to analyze changes in the Maryland shad runs, but since shad destined for Maryland streams must first pass through Virginia waters and be subjected to the Virginia fishery, no conclusions are possible. Virginia does not record complete fishery statistics.

It was pointed out that complete catch and effort data are needed for the whole of Chesapeake Bay before the fishery can be intelligently managed. The research agencies in Virginia have recognized this need and are attempting to obtain this information which is already being recorded in Maryland.

Fishery statistics including gear fished for Southern States is almost entirely lacking. Because of this it is impossible to make recommendations for managing the fishery. We have determined the amount of gear used, total catch and size of run for the Neuse River and St. Johns River during the season upon which we made our studies. These data are available and can be used when complete statistics are collected. On both these rivers one factor that was brought out was the importance of the sport fishery. On the Neuse River the sport catch of shad equaled that made by the commercial fishery.

Adequate fishery statistics are a necessity if these fisheries are to be intelligently studied and utilized. Some progress is being made in this regard in Florida and in Georgia where shad studies are now being carried out, but little is being done in North Carolina at the present time.

Mr. TOLLEFSON. A question that I have had in mind for a number of years is with respect to the Alaskan salmon picture. I have had the impression that your Department has not ever had sufficient funds to do the research work necessary to find the answer concerning the fluctuations in the Alaskan salmon. Am I correct in that assumption?

Mr. SUOMELA. That is a correct assumption.

Mr. TOLLEFSON. As I remember, in considering some shipping problems, we were informed that the Alaskan coast line ran into many thousands of miles. Do you have any idea of what that is?

Mr. SUOMELA. I do not recall, Congressman, but we can insert that in the record.

Mr. TOLLEFSON. My recollection is that they have a coastline there of some 12,000 or 15,000 miles.

Mr. SUOMELA. I think it would be that.

Mr. TOLLEFSON. That is indented with a tremendous number of bays.

Mr. SUOMELA. Yes.

Mr. TOLLEFSON. And into them flow a great number of streams up which the salmon go.

Mr. SUOMELA. That is right.

(Dr. Walford furnished the following information:)

The Alaskan coastline has a total of 13,000 miles of which 10,000 miles are fished.

Mr. TOLLEFSON. And you just do not have the funds or manpower to do the checking that you would like to do?

Mr. SUOMELA. That is correct.

Mr. TOLLEFSON. I would like to ask Dr. Kahn with respect to some information he furnished the committee years ago. He prepared at my request some figures in connection with a matter that Mr. Allen brought up yesterday having to do with the amount of money the Federal Government spent per ton of farm products produced as compared to the money the Federal Government spends for ton of fish products produced. Are those figures still available?

Mr. SUOMELA. Mr. Congressman, they are still available, and as far as we know now, they are substantially the same as they in 1945.

Mr. TOLLEFSON. There was a later figure presented to me. I got some figures from Dr. Kahn in 1948, I think.

Mr. NORBLAD. I believe the gentleman in the blue suit can answer the question.

Mr. ANDERSON. Dr. Kahn is reworking those figures now. The earlier figures were $7.05 for agriculture and 82 cents for fisheries per ton of food produced. As Mr. Suomela said, our best information now is that the ratio of 9 to 1 is still applicable. Dr. Kahn is bringing those figures up to date and will have them available for the record.

Mr. TOLLEFSON. We could use those figures in the record, and with your permission, Mr. Chairman, they may be inserted?

Mr. NORBLAD. The figures will be supplied to the clerk and will be put into the record at this point.

(The figures requested are as follows:)

Production, income taxes, and Federal expenditures for fishermen and farmers

	Average fisherman	Average farmer
Food production:		
1940 ..... pounds	47,000	34,500
1953 ..... do	42,220	68,133
Income taxes paid, 1951	$314.00	$129.00
Authorized Federal expenditures, 1954	51.12	267.79
Ratio of Federal expenditures, 1954	1.00	5.24

A comparison of Federal agricultural and fishery authorizations and appropriations, fiscal 1954

Agricultural authorizations	Fishery authorizations	Agricultural appropriations fiscal 1954	Fishery appropriations fiscal 1954	Fishery authorizations required to equal agricultural authorizations	Fishery appropriations required to equal agricultural appropriations [1]
Land-grant colleges: The first Morrill Land-Grant College Act of June 2, 1862, granted to each of the States an amount of public land equal to 30,000 acres for each Senator and Representative it had in Congress, or the equivalent in land script, proceeds from the sale of which were to be used for the endowment, support, and maintenance of at least 1 college where the leading subjects would be branches of learning related to agriculture and the mechanic arts. (According to Statistical Abstract of the United States, 1946, p. 163, about 16 million acres were granted to agricultural colleges. The value of this acreage is estimated at the time of grant as being $320 million.) Later statutes provide for assistance in the operation and maintenance of these land-grant colleges.	None. (No direct authorizations for fisheries. Small apportionments were made under land-grant college authorizations in such cases as the University of Washington School of Fisheries and the Oregon State College.)	(a) No endowment appropriation; (b) appropriation for instruction, fiscal year 1952, $5,030,000.	None (except for small apportioned land grants in such cases as the University of Washington School of Fisheries and the Oregon State College.)	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to establish by itself, or in cooperation with States, counties, municipalities, or other public organizations colleges for fishery education or vocational high schools for fishermen or fishery industrialists, or to establish by itself or in cooperation with said organizations courses in fishery education. It also is hereby authorized to employ by itself or in cooperation with with said organizations teachers and other personnel, to establish scholarships for students, to rent or erect buildings for the purpose of the execution of this authorization, and to do anything which seems to be proper to maintain the colleges, schools, or courses established.	Endowment appropriation for fishery schools, colleges, and courses, $6,400,000; instruction, $125,800.
Agricultural extension work: Several statutes starting with the act of May 8, 1914, and ending with the act of Oct. 27, 1949, have authorized the Department of Agriculture to cooperate with land-grant colleges in giving instruction and practical demonstration in agriculture and home economics to persons not in attendance.	None	$29,770,956	None	In order to aid in diffusing among the people of the United States useful and practical information on subjects relating to the fishery industries and home fishery economics, the Department of the Interior, Fish and Wildlife Service, hereby is authorized to give instruction and practical demonstration in fishing, industrial use of fish, and in home fishery economics through field demonstration, publications, and otherwise.	For fishery extension work, $744,000.

Economic investigations: By several statutes, of which the most important is the act of May 11, 1942, the Bureau of Agricultural Economics is authorized to conduct investigations relative to agricultural production, distribution, farm labor, farm finance, costs, prices, and income in their relation to agriculture. (See also Department of Agriculture Appropriation Act of 1954.)	The Fish and Wildlife Service, Department of the Interior is authorized, as successor of the former Bureau of Fisheries, to make investigations to determine the best and cheapest means "* * * of taking fish and aquatic animals, utilizing them for economic purposes, especially for food, and to encourage the establishment of fisheries and markets for them" (resolution Feb. 9, 1871).	$5,715,000	$38,329	The Fish and Wildlife Service, Department of the Interior, hereby is authorized to conduct investigations relative to fishery production, manufacture, and distribution, also, relative to values, costs, prices, and income in their relations to the fishery industries, including investment, fishery population, fishery labor, insurance and taxation, and living conditions of fishermen and fishery workers, and related subject matters.	For economic studies of fisheries and fishery industries, $143,000.
Statistical research and estimates on future production: The Department of Agriculture by several statutes is authorized to collect statistics on crops and livestock, also on movements in warehouses and stockyards (see act of June 30, 1914, establishing the Bureau of Crop Estimates; the United States Warehouse Act of Aug. 11, 1916; the Packers and Stockyards Act of Aug. 15, 1921; the Cotton Statistics Act of Mar. 3, 1927; the Tobacco Statistics Act of Jan. 14, 1929; the Agricultural Marketing Act of Aug. 14, 1946; and the act of July 25, 1947 (61 Stat. 457).	The Department of the Interior, Fish and Wildlife Service, and its predecessor agencies respectively have been authorized by joint resolution approved Feb. 9, 1871, to "* * * ascertain whether any and what diminution in the number of food fishes of the coast and lakes of the United States has taken place." This authorization includes necessarily the collection of statistics on the productivity of the respective fisheries.	Total appropriation, $12,474,450.	Total appropriation, $149,985.	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to collect data and information on fish production and the manufacture and distribution of fishery products as well as on holdings of fishery products in warehouses. The data collection may extend to prices, costs of production, distribution, consumption, and related subjects. The collected data may be assembled and published or otherwise made available to the people of the United States.	$312,000.
Marketing services: The authorizations of the Department of Agriculture are contained in several statutes referring to market news services and market inspection of farm products and standardization of farm products (Organic Act of Sept. 21, 1944; Tobacco Act of June 5, 1940; Cotton Standards Act of Mar. 4, 1923; Federal Seed Act of Aug. 9, 1939) and to the supervision of warehouses and stockyards (United States Warehouse Act of Aug. 11, 1916; Packers and Stockyards Act of Aug. 15, 1921; and Agricultural Marketing Act of 1946).	The authorization mentioned in Economic Investigations is the basis for a Market News Service for which appropriations are regularly passed. No funds have been provided the Fish and Wildlife Service to establish standards for fishery products, supervise warehouses, or inspect fish and fishery products.	$24,998,500	$208,868	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to maintain a Market News Service for the fishery industries, to establish standards for fishery products, to establish a voluntary inspection service for fishery establishments and fishery products, and to supervise warehouses in which fishery products are held.	$625,000.

See footnote at end of table, p. 83.

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A comparison of Federal agricultural and fishery authorizations and appropriations, fiscal 1954—Continued

Agricultural authorizations	Fishery authorizations	Agricultural appropriations fiscal 1954	Fishery appropriations fiscal 1954	Fishery authorizations required to equal agricultural authorizations	Fishery appropriations required to equal agricultural appropriations [1]
Commodity exchange authority: The Commodity Exchange Act (7 U. S. C. 1–17a) gives to the Department of Agriculture authorization to supervise commodity exchanges and to exercise some controlling powers over such exchanges. Authorization is also given to the Department of Agriculture to supervise public livestock markets (Packers and Stockyards Act of Aug. 15, 1921).	None	$700,000	None	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to obtain information from the fish exchanges and similar establishments of the United States and request reports on their activities, especially on sales, prices, and governing rules.	$17,500.
Farmer Cooperative Service: The Department of Agriculture is authorized by the acts of July 2, 1926, and Aug. 6, 1953 to assist farmer cooperatives in marketing.	None (except applicable language in recent Department of Interior Appropriation Acts).	$2,545,000	$5,000	The Department of the Interior, Fish and Wildlife Service, is authorized to provide fishermen's cooperatives with research and technical assistance in cooperation with State and local agencies.	$64,000.
Agricultural marketing agreements and agricultural adjustment programs: By statute of June 3, 1937, the Department of Agriculture was authorized to establish and maintain orderly marketing conditions for agricultural commodities by reaching agreements among producers, or by imposing such agreements. This act authorized the establishment of production or distribution quotas and allotments. These provisions were taken over in the Agricultural Adjustment Act of Feb. 16, 1938, which act increased the authority of the Department of Agriculture by guaranteeing parity prices for certain farm products. The Sugar Stabilization Act of 1948 is an extension of this activity to sugar production.	None	Commodity stabilization, $44,350,000; sugar stabilization, $59,608,000; total, $103,958,000.	None	The Department of the Interior, Fish and Wildlife Service, is hereby authorized to enter into contract with public or private organizations for the purpose of management of the fisheries in certain areas, to increase the commercial fish food supply, and to balance excessive highs and lows of production. The Fish and Wildlife Service is authorized to establish programs and make studies, request information and reports in connection with such contracts.	$2,599,000.

Conservation programs: By act of Apr. 27, 1936, Congress engaged in a broad program of soil conservation to preserve the natural resources and to protect public health and public lands. Under this act, amended up to date, authorization was granted to the Department of Agriculture to elaborate and materialize programs which include preservation and improvement of soil fertility, promotion of the economic use and conservation of land, and the diminution of exploitation and useful use of national soil resources. For the administration of these programs, additional authorizations have been passed, especially by the Act of Sept. 21, 1944, and by the Department of Agriculture Appropriation Act, 1954.	Comparable fishery authorizations are contained in the Act of May 21, 1930, for the purpose of assuring natural propagation and maximum survival of hatchery and other fish. (See also 5 U. S. C. 133-T; 16 U. S. C. 744-757.) To protect Alaska fisheries, a special authorization is given in 16 U. S. C., 631A-631R, 659; 48 U. S. C., 220 FF.	$225 million	$3,602,121, composed of $563,000 funds for hatcheries, etc.; $670,621 management of commercial fisheries in Alaska; $18,500 Office of Foreign Activities for international conservation programs; $2,350,000 fishery biology programs.	Text of existing authorization could remain unchanged.	$5,625,000.
Promotion of export and domestic consumption: By sec. 32 of the Act of Aug. 24, 1935, as amended, the Department of Agriculture is authorized to encourage export of agricultural commodities and the domestic consumption of such commodities by certain means described in the act.	The authorization mentioned in agricultural authorizations of this section is extended to fishery products and partly executed by the Department of the Interior, Fish and Wildlife Service. Of an authorized amount of $1,500,000, only $175,000 was transferred for the fiscal year 1954 to Fish and Wildlife Service for promotional work in market development and education. The balance of $1,325,000 is retained by the Department of Agriculture and is at present not being used for fishery purposes.	$172,417,000	$175,000 (educational and Market Development Section, Branch of Commercial Fisheries).	As proposed in S. 2802 and H. R. 7641, 83d Cong.	$4,310,000.

See footnote at end of table, p. 83.

A comparison of Federal agricultural and fishery authorizations and appropriations, fiscal 1954—Continued

Agricultural authorizations	Fishery authorizations	Agricultural appropriations fiscal 1954	Fishery appropriations fiscal 1954	Fishery authorizations required to equal agricultural authorizations	Fishery appropriations required to equal agricultural appropriations [1]
Crop or harvest insurance: By act of Feb. 16, 1938, the Federal Crop Insurance Corporation was created for the purpose of insuring producers of wheat against loss in yields due to unavoidable cause. This act was amended several times to include other crops, as, for example, cotton, corn, and tobacco. (Last amendment, Aug. 13, 1953.)	None	For assistance to the Crop Insurance Corporation during the fiscal year 1954, $7,450,000. The U. S. Government's interest in the Federal Crop Insurance Corporation at Sept. 30, 1953, was $39 million.	None	The Department of the Interior, Fish and Wildlife Service' is authorized to study the problem of protecting fishermen and fishery industries against extraordinary losses due to unavoidable hazards in harvesting fish. It is also authorized to design and inaugurate a self-supporting fish harvest insurance program, except for the cost of administration. In establishing and materializing a fish harvest insurance program, sound insurance principles have to be applied and the operating results have to be reported yearly to Congress.	For program studies, $186,000; for financing insurance, $975,000.
Agricultural research administration: The Hatch, Adams, Purnell, Bankhead-Jones, and related acts provide for agricultural research of a biological and technological nature. Later acts, as, for example, the Plant Quarantine Act, the Adulterated Seeds Act, the Organic Act of 1944, and the act of Aug. 8, 1953, provide authorizations for an extensive program of bacteriological and chemical research.	The Department of the Interior, Fish and Wildlife Service, is authorized to ascertain the causes of the diminution in the number of food fishes and also whether any and what protective, prohibitory, or precautionary measures should be adopted. (See resolution, Feb. 9, 1871, act of Mar. 3, 1887, and act of June 21, 1916.)	$64,678,000	Exploratory fishing, $373,296; technological studies, $335,522; Fishery biology, $500,000; total, $1,208,818.	The existing authorization seems to be sufficient.	$1,617,000.
Assistance in rural rehabilitation and grants to needy producers: By act of July 12, 1943, the Department of Agriculture is authorized to make grants to farmers for rehabilitation purposes and to service and collect loans of needy farmers. (Additional legislation in Public Law 531, approved July 14, 1952.)	None	Farmers' Home Administration, $27,600,000. The U. S. Government's interest in loan funds of this Administration at Sept. 30, 1952 was $608 million.	None	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to assist in the rehabilitation of fishermen, to give loans for the establishment of communities of fishermen, to take over loans of fishermen, producers, and processors of fishery products, if they are in need, and to service and collect such loans.	For program studies, $690,000; for loans, $15,200,000.

Electrification projects: The Rural Electrification Act of May 20, 1936, as amended, authorizes the Department of Agriculture to prepare, study, and execute rural electrification programs. The execution of such programs may be financed by loans, given by the Department of Agriculture, the funds of which are to be transferred from the Secretary of the Treasury.	....do....	$7,775,000. The funds invested by the U. S. Government in this activity at Sept. 30, 1952, were $1,986 million.	....do....	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to study and prepare programs for electrification of fishermen's communities along the coasts and lakes of the United States and the adjoining waters. It is authorized to execute the programs in cooperation with the Rural Electrification Administration, Department of Agriculture, and the lending power of this latter agency hereby is extended to such areas of fishermen's communities which are recommended by the Fish and Wildlife Service, Department of the Interior.	(*a*) For program studies, $195,000 (for 1 year only); (*b*) for loans to be made available, $49,650,000 (endowment appropriation, revolving fund).
Loan and credit programs: The Farm Credit Administration is authorized by several acts, as act of July 21, 1932, act of Jan. 8, 1934, act of July 22, 1937, and act of Dec. 6, 1945, to give directly or through supervised Government corporations short-term or long-term loans to farmers. Long-term loans are given by the Federal Farm Mortgage Corporation (act of May 12, 1933). Short-term credits are given by 12 Federal intermediate credit banks (act of Apr. 25, 1939) and by 12 production credit corporations (Farm Credit Act of 1933), which finance and supervise 505 cooperative production credit associations. In addition, the Department of Agriculture, in 12 Federal land banks, has invested Government-owned capital stock as well as in 12 banks for cooperatives, which banks finance farmers' cooperatives (Farm Loan Act of Jan. 23, 1932, Agricultural Marketing Act of June 15, 1929).	....do....	The appropriation for the fiscal year 1954 appropriates $3,930,000 from funds available to these corporations, for expenses. Funds invested by the U. S. Government in these corporations on Sept. 30, 1952, were as follows: Federal Farm Mortgage Corporation, $29 million; Federal intermediate credit banks, $60 million; production credit corporations, $52 million; banks for cooperatives, $290 million; total, $431 million.	....do....	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to study the problems of short-term and long-term credit for the fishery industries. The Federal Farm Mortgage Corporation, the Federal intermediate credit banks, the production credit corporations, and the banks for cooperatives, as well as their affiliated corporations and cooperatives, are authorized and directed to extend their credit facilities to members of the fishery industries and to accept members of the fishery industries as shareholders or cooperative members, respectively.	(*a*) For program studies, $98,300 (for 1 year only); (*b*) for loans to be made available, $10,775,000 (endowment appropriation, revolving fund).

See footnote at end of table, p. 83.

A comparison of Federal agricultural and fishery authorizations and appropriations, fiscal 1954—Continued

Agricultural authorizations	Fishery authorizations	Agricultural appropriations fiscal 1954	Fishery appropriations fiscal 1954	Fishery authorizations required to equal agricultural authorizations	Fishery appropriations required to equal agricultural appropriations [1]
Disaster relief: Public Law 175, 83d Cong., appropriated $130 million to a disaster loan revolving fund. Of this amount $40 million was used to subsidize losses on supplies of feed made available by the Federal Government.	None	$40 million	None	The Department of the Interior, Fish and Wildlife Service, is authorized to assist fishermen in event of disasters such as the red tide, sea lamprey scourge, etc., so as to relocate, rehabilitate, and otherwise aid them to overcome those disasters.	$1 million.
Parity-price maintenance: By Executive Order 6340 of Oct. 16, 1933, supplanted by act of Congress of Jan. 31, 1935, the Department of Agriculture, through the Commodity Credit Corporation, is authorized to stabilize prices of agricultural products. Several later acts of Congress, especially the Stabilization Act of 1942, require that the Commodity Credit Corporation make loans to support parity prices—that means prices which guarantee a fair relationship between the prices of products the farmers have to buy and the prices of products farmers have to sell. The Commodity Credit Corporation is authorized to carry out its program by direct price support, foreign purchases, commodity exports, subsidies and loans. (See also act of Aug. 7, 1953, Public Law 216.)	No authorization for fishery products exists in this field, with the exception of the authorization in Public Law No. 393, 76th Cong., approved Aug. 11, 1939. By this statute the Department of Agriculture is authorized to acquire fishery products and to use funds not exceeding $1,500,000 to divert such fishery products from excessive market supplies.	$231 million (composed of 14-year average cancellation of notes, which amounted, from 1939 to 1953, to $3,233,124,823).	do	The Department of the Interior, Fish and Wildlife Service, hereby is authorized to study and prepare programs for the purpose of maintaining parity prices for fish and fishery products. Parity prices are such prices which guarantee a fair relationship of the prices of commodities which fishermen have to purchase and the prices of fish they offer for sale. The Commodity Credit Corporation is authorized and directed to extend its programs, and the execution of such programs to fishery products in accordance with recommendations of the Fish and Wildlife Service, Department of the Interior.	$5,775,000. (Represents cancellation of Treasury notes for losses on parity-price programs executed by the Commodity Credit Corporation.)

Summary: The Department of Agriculture has authorizations to act in in all the 17 subject matters mentioned above.	The Department of the Interior, Fish and Wildlife Service, has authorizations to act only in 6 out of the 17 mentioned subject matters.	Appropriations for the benefit of agriculture in 1954 amounted to $1,585,337,000. The total expenditures for agriculture include the cancellation of Treasury notes for losses of the Commodity Credit Corporation, amounting yearly to $231 million on the average for the last 14 years. They also include such special funds as FOA sec. 550 funds which are not individually described above. The total expenditures for each farmer were $267.79.	The appropriations for commercial fisheries in 1954 amounted to $5,388,121, or $51.12 for each regular commercial fisherman. No endowment or revolving funds exist for the fishery industries except in the case of indirect funds obtained under land-grant college authorizations.	Federal legislation would be required for 10 of the items listed.	(*a*) Continuous appropriations, $24,126,600 (including apportioned parity payments), $18,351,600 (not including apportioned parity payments); (*b*) endowment and revolving funds, $83 million.

[1] On basis of ratio of domestic retail agricultural monetary food values to domestic retail monetary fish food values, 40 to 1. A ratio based only on food values has been used, although nonfood agricultural expenditures are included in the agricultural appropriations. This is counterbalanced by the existence of many unaccountable benefits to agriculture such as those from reclamation and water control programs, gifts of United States wheat to India and Pakistan, homestead arrangements on the public domain, etc.

Mr. ALLEN. You talked about the lamprey eels. As I remember our last hearing on this subject, we had authorized enough funds to complete the initial part of that program and enabled the service to determine the method by which the lampreys could be controlled or eliminated. My recollection is the next step was to get the cooperation of the States that were involved and the Government of Canada for two reasons: (1) That the areas that would profit by the industry should carry, or at least share the expense of keeping it in being, and the other, there was obviously no great purpose in controlling the American streams unless the Canadian streams were also controlled.

The point of my question is—I would like to find out whether it is just money that is stoppong it, or are these other questions entering into the picture?

Mr. SUOMELA. I may say in response to your question, discussions are being had on this very problem that you are speaking about—the cooperation between the States and the Canadian situation.

Mr. ALLEN. Would it be truly stated at the present time there is no lack of authorization for appropriations that is standing in the way of progress on the situation?

Mr. SUOMELA. I cannot answer that question.

Mr. CHANEY. There seems to be full authorization for that. The authority still continues for whatever work may be necessary along that line.

Mr. ALLEN. At the present time you are not held up by a shortage of money?

Mr. CHANEY. No. I understand that the first phase, as you outlined it, has been completed; namely, the facilities to eradicate the eels have been discovered.

Mr. ALLEN. On the Pacific Ocean fisheries investigation, first, I would like to say I think your report is the first comprehensive index of the work being carried out that this committee has had in 4 or 5 years. As far as I can remember, it was the first one ever voluntarily submitted. On both those counts I compliment you.

My recollection of that Pacific Ocean fisheries investigation was that it came up on Mr. Farrington's bill, introduced for the primary purpose of discovering where the tuna around Hawaii were going, and more particularly to see if the canning season of Hawaii could not be extended by a couple of months on each end of the existing season. I think the investigation has gone far beyond any endeavor just to solve that problem.

Mr. SUOMELA. I believe it did authorize the study of the tuna fisheries as it affected the economy of the Hawaiian group and the trust territories, Mr. Allen, so it was not only for the Hawaiian group but also in connection with the trust territories.

Mr. ALLEN. As a matter of fact, has it not been a far greater benefit to the other areas than the Hawaiian Islands and trust territories?

Mr. SUOMELA. No. I think that the Hawaiian group has benefited very materially from that study. For example, on the yellow-fin tuna investigation, which is a part of the overall investigation, and also the skipjack fishery, the Hawaiian Island group has benefited very materially from these studies, and it has just been recently that the studies have been carried northward from the Hawaiian Islands on

the albacore work. That particular phase of the work will benefit the Hawaiians also materially.

Mr. ALLEN. I have been convinced from the outset, particularly after finding out quite a bit of what was going on out there, that the studies were extremely valuable and ought to be continued, but I could not help but doubt but what the Service was going far beyond that authorizationally intended to be given in conducting them. My question is whether or not you should not come in here with some recommendation for a much broader authorization than the one under which you are proceeding.

Mr. SUOMELA. That is certainly a very good idea. I certainly agree with you.

Mr. NORBLAD. Did you say a minute ago, Mr. Suomela, that the tuna studies Mr. Allen has been referring to were also of some benefit to the Pacific coast?

Mr. SUOMELA. Yes, they will be in principle. In the principle being studied, they will be of benefit.

Mr. ALLEN. As far as I am concerned, it was far more beneficial to the Pacific coast than it was to Hawaii. I do think that the authorization is far less than the study that has been carried on, and I was only afraid that someone would come up and stop it just on that basis. That is the last thing that I would like to see happen.

Mr. SUOMELA. I would like to say this is the first year that the American industry has gone into the island groups.

Mr. ALLEN. Has anyone spent any money except Samoa?

Mr. SUOMELA. Van Camp is in Samoa. We will check that.

Mr. ALLEN. I know in the document that has been presented to the committee which prints the letter of September 23 written by Mr. Moore, Acting Secretary of Agriculture, on page 5 there is the following statement:

> The Department of Agriculture, through its Bureau of Human Nutrition and Home Economics, conducts research in nutrition and the utilization of agricultural products, including fish, as food and also maintains educational service to homes and institutions regarding all food products. The Department, through its plentiful foods program, works with the food trade to promote the distribution and consumption of those foods, including fish, which are in surplus supply. It would not seem advisable to expand such services in another department not primarily concerned with the marketing and utilization of food products.
>
> In view of the above, this Department recommends against the passage of the bill.

Do you go along with that statement?

Mr. SUOMELA. I will say that the Fish and Wildlife Service is the primary agency for the study of the fisheries of the United States.

Mr. ALLEN. Is it not true that within your department there has been far greater activity in the promotion of the use of fish for food than has ever been conducted in the Department of Agriculture?

Mr. SUOMELA. That is correct, sir.

Mr. ALLEN. Can you give me one instance where the Department of Agriculture has ever promoted the use and distribution of fish?

Mr. SUOMELA. I believe that Mr. Anderson can answer that. We do furnish the Department of Agriculture information on the fisheries which I believe they may disseminate.

Mr. ANDERSON. I might say in connection with the statement that Agriculture has made, I believe that Agriculture has made its state-

ment in the sense that fish is one of a number of foods, food products, on which it works, and certain general research is done which probably includes fish.

But the specific work on fish is always done in the Fish and Wildlife Service. There is close cooperation, however, between the Fish and Wildlife Service and similar activities in the Department of Agriculture.

For example, the plentiful foods program mentioned in the agricultural report, all the information on fish is supplied by the Fish and Wildlife Service. We supply that periodically to them, and it is used in their plentiful food supply report, both nationally and regionally. But otherwise, as Mr. Suomela says, the specific work on fishery products is done in the Fish and Wildlife Service. We conduct the work on composition of fish, vitamin content, nutrient values, and all things of that sort.

Mr. ALLEN. In a sense, all the Department of Agriculture knows about fish is what you tell them?

Mr. ANDERSON. That is a little bit broad. They do cover food products in general, which of course includes fish, but not the specific work. We conduct that and they refer those problems to us, and we work closely, for example, with Dr. Hazel Stiebling, who does similar work on agricultural products. The cooperation between the Department of Agriculture and the Department of the Interior is very good. There is no duplication that I know of.

Mr. ALLEN. Mr. Suomela, I notice that we have five bills before us. Have you made a sufficient study of them to tell us which bill, if any, has provisions which you prefer?

Mr. SUOMELA. Mr. Allen, may I refer that to our legal counsel?

Mr. CHANEY. Yes, Mr. Allen; we have studied the five bills, I believe, that are listed. I do not have them before me, but it is my recollection that the bills introduced by Congressmen Bates, Lane, and Knox all peg the available funds to 30 percent of the receipts from duties imposed on the importation of fishery products. The other two place a fixed amount. The earlier bill, H. R. 5829, Mr. Bates' bill, fixed the amount at $3 million.

Mr. NORBLAD. I think that Mr. Knox is the author of that bill.

Mr. CHANEY. Mr. Lane's bill mentions $3 million.

Now, the 3 bills which peg the amount to 30 percent of the import duties make a very broad authorization for the use of the funds. It includes biological, technological development of markets. The other two include provisions for the purchase of surplus fishery commodities.

Mr. ALLEN. At this point, will you mention the numbers of the 3 and the numbers of the 2?

Mr. CHANEY. Let me see if I can get them straightened out. Mr. O'Neill's bill, Mr. Bates' bill, and Mr. Knox's bill are all pegging the amount at 30 percent. The earlier bill by Mr. Bates was a $1 million authorization, and the bill by Mr. Lane was a $3 million authorization; is that correct?

Mr. TOLLEFSON. You mentioned the bill has rather broad authorization for the use of funds that would come under the bill.

Mr. CHANEY. That is right.

Mr. TOLLEFSON. Is that authorization any broader than those under section 32 given to the Department of Agriculture?

Mr. CHANEY. The section 32 funds of 1939 were made available for two purposes. I am speaking of section 2 of the 1939 act now. One was to promote the free flow of domestically produced fishery products in commerce. That objective is similar to the objective contained in the bills now pending. The other was the development of markets.

Mr. TOLLEFSON. You misunderstood my question. I am not talking about the broad authority given to the Fish and Wildlife Service with respect to the $175,000; I am talking about the authority given to the Department of Agriculture to use some $125 million a year.

Mr. CHANEY. I see. It is a ceiling of $300 million now. It was primarily for the purpose of surplus agricultural products; from normal trade.

Mr. TOLLEFSON. And they have full discretion in that respect?

Mr. CHANEY. That is right, sir.

Mr. ALLEN. With regard to the bills that provide for the 30 percent, I believe it is true that the general bill providing for the agricultural program is also 30 percent. In fact, the bill would treat fisheries in exactly the same manner as agricultural industry is treated?

Mr. CHANEY. Not exactly, Mr. Allen. In 1935 when section 32 was enacted, there was an authorization to divert 30 percent of income duties on all products imported into the United States. It is my understanding that that 30 percent was arrived at on the basis that agricultural products imported represented approximately 30 percent of the value of the imports. Thus, agriculture at that time—and of course, the situation has changed up and down—at that time the Department of Agriculture received 100 percent of the import duties on agricultural products for the purpose of section 32, whereas these bills simply give 30 percent of the import duties on fisheries products, so it is a third, approximately, in relation to what agriculture gets.

Mr. TOLLEFSON. Do you know how much it would produce roughly for fisheries?

Mr. CHANEY. My understanding is that the import duties now are such that it is close to $4 million. Another figure of $3,500,000 has been mentioned. That may be more nearly correct. I thought it was $4 million.

Mr. TOLLEFSON. I think that I will ask Mr. Suomela this question. What will you do with $3 million or $4 million?

Mr. SUOMELA. I think certainly considerable study should be given as to where the money should be spent. I think that we should very closely examine all our projects.

There are a number of projects we mentioned in the statement that could be expanded very materially. We could expand our work in Alaska. We have a number of problems having to do with our oyster and shellfish on the east coast that could be very materially expanded and worked upon. By expansion I just do not mean the expansion of the Fish and Wildlife Service personnel. I think where other institutions can, and have the facilities to do the work, they should be taken into consideration in money through contract or cooperative work. In order to get a lot of this work done, and get it done quickly, I think we certainly need the cooperative efforts of States as well as institutions who have the facilities to do the work. I know that the Fish

and Wildlife Service, when they do get the funds, will very, very closely scrutinize us as to where the money is to go so that it will go toward the best efforts in working on these fisheries problems.

Now, we have problems down in the Gulf States on our shrimp work. We have the red tide work, so there are a number of fisheries that were not mentioned in the statement. Mr. Allen, where we do have to have considerable work done as well as in the technological fields.

Mr. ALLEN. Do you think the money you are already spending in investigations will be applied against this new income so that you will have a net of quite a bit less money from the tariff provisions, or is it your thought what is now being provided should continue to be provided and there will be a necessity to use all of this tariff provided funds in addition if a good part of your program of investigation is to be carried out?

Mr. SUOMELA. I think we should.

Mr. MAILLIARD. Is that cooperative research work that is carried on by the State of California, the University of California, and the California scientists and your Department still continuing?

Mr. SUOMELA. Yes.

Mr. MAILLIARD. In sardine research?

Mr. SUOMELA. Yes.

Mr. MAILLIARD. Has it gotten to the point where your people, or people working cooperatively, can hazard a reasonable guess as to what happened to the sardines?

Mr. SUOMELA. May I refer that question to Dr. Walford?

Dr. WALFORD There was a report recently produced by the scientific committee which is composed of scientists representing all of the cooperative organizations, and they agree in this report that they are not certain yet what caused the disappearance. Evidently there was a change in the environment which had a great deal to do with it. There is a great deal of evidence that the water in which sardines can live, the water in which they must spawn, has shifted toward the southward so that they can spawn only in water of 13.5° to 16.5° Centigrade and that water now appears about a month later in California than it did during previous years, and does not extend so far northward and does not persist as long during the season. Thus it is not possible for sardines to extend so far north as they did in previous years. They are not certain whether the abundance has increased in lower California, but there is evidence to support that belief. Unfortunately, observations had not been made in the earlier period for comparative purposes.

Mr. MAILLIARD. In other words, at least a tentative opinion, as a result of this research, is that it was probably not over-fishing but a change of ocean currents that removed the sardines from Monterey Bay in the central California area?

Dr. WALFORD. It was not wholly one or the other. In the very beginning there was a belief that it could have been wholly overfishing, or it could have been wholly a change in environment and the prevailing opinion now is that it is a combination of both.

Mr. MAILLIARD. Did they express any opinion in the report as to whether this is a permanent change?

Dr. WALFORD. They did not, but it could not be a permanent change because nothing is permanent about the sea.

Mr. MAILLIARD. What I meant was, was there any expectation from the information available to them that another shift might occur that possibly would restore the old situation, or maybe something different?

Dr. WALFORD. They cannot foresee any changes in currents yet. We do not know enough about the relationship between meteorology and hydrology, and certainly not enough about meteorology to make any long-range prediction. However, a similar thing happened on the oriental side of the Pacific and sardines are now increasing in abundance in Japan. If there is any parallelism between the two events, that can give us some encouragement to expect a change on our side of the Pacific.

Mr. MAILLIARD. If I recall correctly, Doctor, the disappearance of the sardines from the Japanese coast was 1 year earlier. That was in 1946, was it not?

Dr. WALFORD. Yes.

Mr. MAILLIARD. It was 1947 when they disappeared off the coast of California.

Dr. WALFORD. Yes.

Mr. MAILLIARD. So if they are beginning to come back in Japan, if there is a parallelism, a year later we may expect them on our side?

Dr. WALFORD. That is correct, but there is no scientific basis for making a prediction.

Mr. MAILLIARD. This is obviously a very broad research program. Would the additional funds provided under this bill make an appreciable difference to the rate of progress of such a broad research program?

Dr. WALFORD. Yes, it would about double it. We are not able to make any studies north of Point Conception now. We have not had enough funds to operate our research vessels in northern waters for more than a year. These funds will make that possible.

Mr. MAILLIARD. The Navy gave you a vessel, did they not?

Dr. WALFORD. Yes.

Mr. MAILLIARD. As I recall the Navy withdrew their vessel and sent it over to Korea in 1950 and I think there has been no vessel in the northern area since then. Was it not the *Mulberry*? Maybe those are two different projects.

Dr. WALFORD. I think they are two different projects. Ours is the *Black Douglas* which we have not been able to operate because we have not sufficient funds. That means we cannot explore the spawning grounds of the sardines or related fish north of Point Conception.

Mr. MAILLIARD. Is there any evidence that the depletion in the central California area has been offset by a corresponding increase off the coast of Mexico?

Dr. WALFORD. No, we do not have evidence to that effect. Mr. Eckles is in the room. How do you feel about that? Mr. Eckles has been actively engaged in that sardine investigation quite recently. May I call on him?

Mr. ECKLES. I think I should say we actually do not know the number of sardines that were in Mexican waters prior to the time this expanded research program started in 1949. There were no intensive surveys ever conducted in that area. Since the program has started we have followed the course of the sardines, particularly through the eggs and larvae in the waters to determine where the adult fish actually were by following the spawn. After going farther

and farther south we found there was a large population of sardines living off the area known as Cedros Island. What we do not know at the present time is what is the contribution of that large population in southern waters to California.

Mr. MAILLIARD. Is it correct to say you do not know because you do not have sufficient information on what the situation was prior to 1947?

Dr. WALFORD. Yes, sir.

Mr. MAILLIARD. I regret taking so much time, but this has absolutely destroyed the whole industry and it is very important to the economy of my State. Before I came to Congress I worked with the California Academy of Sciences.

Mr. NORBLAD. Mr. Bonner.

Mr. BONNER. It is an interesting discussion and I am sorry the Atlantic coast is handicapped today. I am the only representative of the great Atlantic seaboard, but the Pacific problem is interesting to me. I regret our full committeeship cannot hear this discussion. Mr. Hand of New Jersey, a former member of this committee and a very distinguished Member of Congress, Mr. Robeson of Virginia, and myself are interested greatly in shellfish and Mr. Hand asked me yesterday to ascertain from you whether or not funds supplied in this bill would be used for study or further study of the disappearance of shellfish, I think it was in the Delaware Bay somewhere in the vicinity of New Jersey. Mr. Robeson is interested in the problem of shellfish in the Chesapeake, and I am interested in the problem of shellfish in the waters of North Carolina and the entire Atlantic coast. This bill of Mr. Bates, or the joint bills here, would enable you to conduct studies of the shellfish?

Mr. SUOMELA. That is correct.

Mr. BONNER. In the studies you have made, have you developed any ways and means whereby the situation could be corrected in Mr. Hand's area?

Mr. SUOMELA. I am not too familiar with Mr. Hand's area. I think Dr. Walford can answer that. We have been doing a lot of work with oysters and clams.

Dr. WALFORD. There is a new situation, as I understand it, in that the adult oysters have become afflicted with a disease and the larvae osyers have a disease. They are two different diseases. We do not know anything about the diseases of oysters. That is a subject that is untouched. We have to learn about those diseases and then find out how they are carried. This is, incidentally, a disease that affects only oysters, not people who eat oysters.

Mr. BONNER. Do I understand that you are not conducting any studies to ascertain why the oysters have been disappearing?

Dr. WALFORD. In this particular instance we have not. This is a new situation. There was a mass mortality of oysters last season. But we are studying what is causing the depletion in New Jersey and Florida. One of the problems is that oysters are subject to quite a collection of predators, particularly snails.

Mr. BONNER. That is known as the borer?

Dr. WALFORD. Yes.

Mr. BONNER. You had authorization to study that some years ago.

Dr. WALFORD. We had the authorization but not the money, I am afraid. We have been trying to work with two people. That is

not enough. It would be like working with houseflies with only two people.

Mr. BONNER. Our friend, Mr. Hand, we miss him here, but he is now on the Appropriations Committee of the House and he is now in a position to help us.

Dr. WALFORD. Very good.

Mr. BONNER. Does the bill before us deal with the importation of fish and fish products in this country?

Mr. SUOMELA. Yes.

Mr. BONNER. Have you made any appeal to the Tariff Commission to assist in that?

Mr. SUOMELA. Last year there was a survey made of the tuna fisheries and I think some recommendations were made as a result of that study.

Mr. BONNER. They raised the import duty?

Mr. CHANEY. No change that I recall has been made recently in import duties.

Mr. BONNER. In 1946 there was a great controversy about Japanese floating canneries affecting the crab industry on the Pacific coast. This committee made an appeal to the Tariff Commission and we did get some results. It has been said here that the importation of fish hurts the industry particularly in the New England States. Has that been called to the attention of the Tariff Commission?

Mr. ANDERSON. Yes. We took up with them some of these problems and in addition the Department of the Interior has membership on the Trade Agreements Committee, which deals with all negotiations on tariffs, and through the Trade Agreements Committee we submit information and departmental views on all these import subjects.

Mr. BONNER. Is that the committee that deals with the exporting of surplus products abroad?

Mr. ANDERSON. No, sir. The Trade Agreements Committee deals only with making recommendations——

Mr. BONNER. Affecting industry in the United States?

Mr. ANDERSON. That is correct.

Mr. BONNER. Then we have some committee in the State Department that seems to be more interested in the consumption of agricultural and fishery products of our foreign friends than those here in the United States, are they not?

Mr. ANDERSON. There is a general administration policy that I would say would be toward freer trade.

Mr. BONNER. It is not exactly freer trade, but permitting the countries we have been aiding to go below the national price level in buying from allied countries in preference to products that are offered by the Government of the United States, is it not?

Mr. ANDERSON. That has occurred in some instances.

Mr. BONNER. You know it has occurred?

Mr. ANDERSON. Yes. The Army, for example, can buy foreign fish.

Mr. BONNER. That has had something to do with the accumulation of our stocks.

Mr. ANDERSON. That is one factor.

Mr. BONNER. If we could get the Tariff Commission to give a nudge to the importation of fish and fish products it would give you more money?

Mr. ANDERSON. You mean if tariffs were raised?

Mr. BONNER. Yes.

Mr. ANDERSON. That is correct. At the present moment the Tariff Commission has under consideration an escape clause with respect to the importation of ground fish.

Mr. BONNER. What does that escape clause mean?

Mr. ANDERSON. New England producers of ground fish fillets have complained that the importation of ground fish fillets is injuring them and they are to state their case to the Tariff Commission.

Mr. BONNER. Is there any indication that the Tariff Commission is sympathetic?

Mr. ANDERSON. That is difficult to say.

Mr. BONNER. They have an escape clause under which they can escape.

Mr. NORBLAD. The Pacific coast people appealed to the Tariff Commission last year.

Mr. ANDERSON. Yes.

Mr. BONNER. In passing, let me ask, is there a cycle of fish in an area?

Mr. SUOMELA. Yes.

Mr. BONNER. On the Atlantic coast we have experienced every 12 to 15 years the appearance of large schools of bluefish. They stay for a year or so and then disappear.

Mr. SUOMELA. When you mentioned a cycle of fish and I said there are cycles having to do with the life of fish, that is very true. Salmon, for example, at a certain time in their life they do return to fresh water to spawn and that is on a cyclical basis. The Chinook Salmon has a life span of from 2 to 6 years and they will come in the river to spawn at those times.

Mr. BONNER. I am speaking about this cycle of bluefish on the Atlantic coast.

Mr. SUOMELA. I was coming back to the Atlantic coast.

Mr. BONNER. All right.

Mr. SUEMELA. I do not think there has been too much work done on the species of the Atlantic coast.

Mr. BONNER. You mean you have been doing more on the Pacific coast?

Mr. SUOMELA. Yes.

Mr. BONNER. I notice this committee is a little off balance.

Mr. SUOMELA. They do know a lot of the life history of the haddock through long study. When we speak in terms of a cycle, we think of the fish coming in during a certain period of their life and I will say I am quite sure in my statement that a lot of fish on the east coast have not had a concentrated study as far as their life history is concerned.

Mr. JOHN FARLEY (Director of Fish and Wildlife.). I think Dr. Walford will have an answer in regard to the bluefish.

Dr. WALFORD. It is true that the bluefish is peculiarly subject to waves of availability. I do not call them cycles because they are not regular, but they come a few years and then disappear. There are also some bluefish on the Pacific coast. The same is true of mackerel. We have a history on mackerel going back 150 years that indicates this, and likewise the codfish, of which we have a history going back to Colonial times.

Mr. BONNER. In recent years we have developed a great shrimp fishing and also menhaden fishing. Prior to this development we had all types of fish close in on the Atlantic coast. Has the taking of the shrimp and menhaden around the inlets reduced the fish food and caused the migratory fish not to come in the sounds and inlets?

Dr. WALFORD. There is no proof of that. The bluefish feed on menhaden, but the bluefish disappeared in 1931 when menhaden fishing was not nearly as intensive as it is now. The bluefish returned in the last few years when the menhaden fishing was close to a peak, and we cannot find evidence that the bluefish depend on that.

Mr. BONNER. Trout feed on shrimp and menhaden, do they not?

Dr. WALFORD. And other things too.

Mr. BONNER. Is it correct to say the fish move where the food is and when the food is taken away they move to another area?

Dr. WALFORD. That is their main job in life, to find food. But there are other elements in the water besides food that affect their distribution.

Mr. BONNER. So you are not certain whether the taking of shrimp and menhaden in the inlets and sounds—I am not talking about out at sea—affect the presence of migratory fish in those waters?

Dr. WALFORD. There is no evidence of that.

Mr. BONNER. What would they feed on?

Dr. WALFORD. The waters are full of feed and bluefish will eat something other than menhaden. The menhaden, of course, will avoid the bluefish, too, if it can. It is a very complicated picture.

Mr. BONNER. That is all.

Mr. ALLEN. Has there ever been a study of the Atlantic waters comparable to that of the Pacific waters?

Dr. WALFORD. Yes. In the Gulf of Maine there have been very intensive studies in oceanography for many years back. There is an oceanographic institution at Woods Hole and also at Johns Hopkins University in the Chesapeake Bay. These organizations work to understand the currents and their effects on the biology of the fish.

Mr. ALLEN. Do they range out beyond the coast?

Dr. WALFORD. The Woods Hole institution does range across the Atlantic and has made expeditions to Africa and South America.

Mr. ALLEN. In the main, the whole area is either only very partially or not at all explored?

Dr. WALFORD. It is not very well explored south of Cape Cod in the open sea and there have been no systematic studies such as have been conducted in the sardine industry.

Mr. BONNER. How many vessels do you have carrying on these ocean studies?

Dr. WALFORD. We have seven vessels. They, however, do not carry on ocean studies unless there is money to operate them. The vessels do operate out of Woods Hole. We have funds enough to operate 3 months of a year or we can operate 6 months every other year. A vessel working out of Brunswick, Ga., has been making a study for the last 2 years but will be unable to work next year if the funds are the same as they were this year. In the gulf we have a vessel tied up this year. On the Pacific the *Black Douglas* has been tied up 2 years. In Honolulu we have 3 vessels and enough funds to operate them this year on the basis of 2 and a fraction ships per year.

Mr. BONNER. What happens to the vessels in the meantime? Do you have to maintain the crew and the people on the vessels for the studies?

Dr. WALFORD. No. The people carrying on the studies are always behind on the material they collect. A properly balanced organization should have 3 or 5 times as many working ashore as at sea, because they bring in so much material it takes that many people to do the job. In England I understand the ratio is 5 to 1; there is 1 going to sea and 5 working ashore. Here we have 1 to 1. The shore studies take longer than sea collections.

Mr. BONNER. Then is it reasonable to say the reason you are behind in your studies has not been lack of sufficient funds entirely?

Dr. WALFORD. That is quite true. Several years ago your committee authorized a study. The report was known as the Baily-Bland report. May I read for the record the recommendations made? This was published in 1945:

> From these conclusions it is recommended that—
>
> 1. The Federal expenditures (*a*) for the benefit of United States Fisheries be raised to a level comparable with those made for other food industries; (*b*) for the conservation and development of its fishery resources be made sufficient to accomplish their purpose.
>
> 2. The Congress authorize the Fish and Wildlife Service to organize a dynamic program that anticipates the needs of the Nation's fishery resources as a whole.

Those are the two most important recommendations.

Mr. BONNER. What was done with that?

Dr. WALFORD. Nothing.

Mr. BONNER. You got no appropriations?

Dr. WALFORD. None for this, no, sir.

Mr. BONNER. So if we pass additional legislation this is the only chance we have to get the funds?

Dr. WALFORD. Yes, sir.

Mr. BONNER. That is included in these bills before us?

Dr. WALFORD. Yes.

Mr. TOLLEFSON. Yesterday I made a comment that I thought Congress had neglected the affairs of fisheries. My colleague thought I said the committee had neglected them. I want the record to show I did not say that. I think the committee has done a wonderful job.

Mr. BONNER. If I misunderstood the gentleman I want the record corrected.

Mr. NORBLAD. The Chair submits for the record a statement by Senator Leverett Saltonstall in support of S. 2802.

(The statement referred to is as follows:)

STATEMENT OF HON. LEVERETT SALTONSTALL, A UNITED STATES SENATOR FROM THE STATE OF MASSACHUSETTS

Mr. Chairman, I welcome this opportunity to appear in support of S. 2802, a bill which embodies the long, hard thought of many people deeply concerned about the future of the fishing industry in the United States.

In recent years the average annual catch of the domestic fishing industry has varied between 4 and 5 billion pounds of fish and shellfish worth to the fishermen $350 million more or less. Directly and indirectly, the industry employs 550,000 people. Throughout the United States, however, the industry is in an increasingly difficult position. Decreased catches, fluctuations in supply, and a lack of improved techniques have all harmed this basic American industry. Rising imports have subjected it to particularly severe pressure.

As a means of overcoming these difficulties, the basic recommendation of all recent studies, including those authorized by Congress, is an increase in research and development activities. The fishing industry, however, is one composed of individuals and small companies lacking the resources necessary to carry on these activities on a long-range basis. The Fish and Wildlife Service of the Department of the Interior is already engaged, on a scale severely limited by inadequate funds, in conducting commercial fisheries research. Recent studies have therefore also recommended the expansion of Fish and Wildlife Service activities to include additional badly needed research and development projects. But an expanded, long-range program requires an assured source of additional funds supplementing current appropriations.

Because the industry's difficulties so largely stem from competition by imports, an appropriate source of supplemenatry funds for research and development is the revenue derived from those same imports. The earmarking of a portion of this revenue would go far toward meeting the fishing industry's most urgent research and development needs. I recognize, of course, that any proposal to earmark a source of revenue is subject to certain difficulties from a budgetary point of view. But in the case of import duties, section 32 of the act of August 24, 1935, sets aside for each fiscal year an amount equal to 30 percent of the gross receipts collected under the customs laws during the preceding calendar year. Thirty percent of import revenues from fishery products are thus already earmarked, but not for the benefit of the fishing industry. On the contrary, the act of 1935, turns these funds over to the Secretary of Agriculture to be used to subsidize the export of agricultural commodities, to make support purchases of such commodities, and to make production payments to farmers.

The Secretary of Agriculture does have authority, it is true, to use a small portion of section 32 funds for the benefit of the fishing industry. This authority derives from the act of August 11, 1939. The 1939 act authorizes the Secretary of Agriculture to use not more than $1.5 million per year of section 32 funds to purchase and divert surplus fishery products for distribution through relief channels. It also permits him to transfer to the Secretary of the Interior $75,000 to conduct a fishery educational service and $100,000 to develop and increase markets for fishery products of domestic origin. In recent years, the funds for a fishery educational service and for market development have been regularly transferred, but no section 32 funds are available for technological and biological research.

Since enactment of the act of 1939, however, gross receipts from duties on fishery products have increased enormously. In 1940 the total amount was $4,772,428; by 1952 it had increased to $11,982,000, an increase of more than 250 percent. During this same period the value of fishery imports increased from $40 million to over $200 million. The domestic industry, in the meantime, by voyaging farther and farther afield at greater and greater expense for every pound of fish caught, has barely managed to hold the share of the market it had at the beginning of the period.

It is thus evident, Mr. Chairman, that during a period when the domestic fishing industry has been increasingly in need of assistance in meeting competition from abroad, it has been making increasingly large indirect contributions for purposes unrelated to this need. S. 2802 is aimed at correcting this plainly unfair situation.

To accomplish this, the bill would amend the act of 1939 so as to require the Secretary of Agriculture to transfer to the Secretary of the Interior every year, from the funds already earmarked under the act of August 24, 1935, that portion derived from the duties on fishery products. The Secretary of Agriculture would still retain power to make support purchases of surplus fishery products under section 1 of the 1939 act, should it ever be deemed desirable to exercise this authority. In addition, the Secretary of the Interior would have power under section 2 (d) to retransfer funds made available under the proposed bill to the Department of Agriculture for this purpose, but this would be an emergency power invoked, if at all, only at rare intervals.

The remaining funds (ordinarily the entire amount) would be used by the Secretary of the Interior to conduct a fishery educational service and fishery technological, biological, and related research programs and to develop and increase markets for fishery products of domestic origin. In carrying out these programs, the Secretary of the Interior would cooperate with other agencies of the Federal, State, and local governments and with interested private organizations and individuals.

In this connection, Mr. Chairman, I would like to suggest what seems to me a sound proposal but one that is not covered by any provision of the bill as it now stands. This proposal is the outcome of discussions with spokesmen of every major segment of our fishing industry from both coasts and the gulf. It is that the bill includes provision for the establishment of an industry advisory committee of individuals familiar with the problems of our domestic fishing industry to be selected by the Secretary of the Interior. I hope that the committee will consider an amendment to the bill along these lines.

To summarize, Mr. Chairman, the basic effect of S. 2802 is to increase the amount transferable by the Secretary of Agriculture to the Secretary of the Interior under the act of August 11, 1939; to establish as the measure of the amount transferred gross receipts from import duties on fishery products; and to add technological and biological research to the purposes for which the Secretary of the Interior may use the transferred funds.

It is important at this point to make clear that an increase in the amount of funds transferred from Agriculture to Interior under the 1939 act would benefit the fishing industry without any sacrifice to Agriculture. The funds available to the Department of Agriculture under section 32 during recent fiscal years have been in the following total amounts:

	Million		*Million*
1950	$125.6	1953	$181
1951	111	1954	172
1952	159	1955 (estimated)	180

The Agricultural Act of 1949 provides for an accumulation of section 32 funds by the Department of Agriculture up to a total of $300 million. Any excess over this amount must be turned back by that Department to the Department of the Treasury. In fiscal 1954, $27 million is being turned back—a sum 7 or 8 times the total which would have been made available by S. 2802 to the Department of the Interior to supplement the research and development activities of the Fish and Wildlife Service.

In the field of biological and oceanographic research, the most urgent need is to explore the reasons for fluctuations in the supply of fish. Reports from the Great Lakes, Alaska, and the Pacific States, and from all along the Atlantic and gulf coasts from the Grand Banks to Mexico, confirm the importance of stability of supplies in establishing new markets for fishery products. Hope for overcoming this problem lies in research on ocean currents, changes in water temperature, abundance of fish food, and other shifting conditions. Scientists can observe these changes sometimes years before fishermen become aware of them and so can predict their consequence. Furthermore, when they foresee a period of scarcity they can advise fishermen which way to shift their operations—whether toward other fishing areas or toward other kinds of fish.

We are informed that the actual numbers in the sea fluctuate constantly as a result of fluctuating death rates with consequent irregularly alternating periods of glut and famine. Here biological knowledge is necessary to distinguish fluctuations in abundance from fluctuations in accessibility and to advise fishermen accordingly. If research reveals that an abnormal influx of natural enemies is causing a heavy mortality outside the range of the fishery, the industry may plan to change the area of fishing and kind of fishing to take advantage of this knowledge by catching the fish before the enemies can get them.

The need for research to determine reasons for fluctuations in abundance is particularly acute in the case of the sardine industry on the east coast and the pilchard industry on the west coast. For many years the Maine sardine industry has asked that scientific research be directed to a study of the abundance of herring in the Gulf of Maine. Each year the answer has been that a lack of funds made the work impossible. Because the seasonal occurrences of herring at different depths are so little understood, the industry is compelled to await the occurrence of the fish in shoal waters, and this occurrence is subject to the variations by more than 40 percent from year to year, with serious shortages of fish in 2 of the last 3 years.

In the case of pilchard, this once great California fishery has shrunk in recent years from a level of production of about 500,000 tons per year to less than 3,000 tons per year. This has substantially damaged the economy of the west coast fishing ports, has eliminated the resource upon which fishing vessels valued at $10 million subsisted, closed canneries and processing plants employing several thousand men and women, and adversely affected related shoreside industries. Adequate research funds have not been available to make it possible to discover

the relations between climate, ocean currents, and fishing production which must be understood if these conditions are to be overcome.

Another of our major fisheries for which biological research is needed is the menhaden, which is taken in larger numbers than any other fish and is found all the way from New England to Texas. In volume, this fish has in recent years represented from one-third to one-half of the total domestic catch and in 1953 reached approximately 2 billion pounds. While many of us are not familiar with this fish because it is not taken for food, it is none the less vital to agriculture since the fishmeal and fish solubles produced from it are essential as animal and poultry feed. Another major product from menhaden is oil, which last year approximated 18 million gallons. This oil finds its way into feed, paint, soap, and infinite other uses in our complex economy and also is exported in substantial amounts to Europe for further processing into food.

In our early history menhaden abounded off the New England Coast north of Cape Cod but since 1880 have been seen there only spasmodically in quantities adequate for commercial enterprise. Throughout the distance, however, from Long Island to Texas there have been frequent major disappearances and enormous variations in supplies at one point and another. While something is known of the habits of this fish, which represents the greatest tonnage of all our fisheries, little or no research has been undertaken. In other words, if agriculture and other markets for the products of this huge fishery are to be able to plan for the most economical usages the suppliers must have information as to most probable migrations and concentrations, which can only be determined through biological research.

The importance of technological research is highlighted by work now sponsored by other governments, whose support of the fishing industry is much more extensive than our own. The Norwegian Government, for example, has assigned a research vessel the sole task of locating shoals of herring by echo-sounder and keeping the fishing fleet informed by radio of the abundance and distribution of the fish. Another Norwegian research vessel, the *G. O. Sars*, is experimenting with echo-sounding equipment with a horizontal range designed to locate fish swimming away from the bottom. This equipment, I understand, is similar to equipment recently employed on an experimental basis by trawlers operated out of Boston, which accounted for an 18 to 20 percent larger catch in a recent trip, although used only for 3 days of the trip.

The British are in the meantime pursuing lines of research designed to discover more about the whereabouts of redfish and cod. For this purpose, underwater television has been used by a British research vessel on the Grand Banks. Today, redfish are caught only in daylight because they seem to rise off the bottom of the Banks at night. According to Daniel P. Norman in an article prepared under a research grant from the Federal Reserve Bank of Boston, it would be of enormous importance to New England redfish fishermen if it were possible to locate them satisfactorily in midwater at night. Redfish trawlers could thus substantially reduce the time it takes to fill their holds and thereby increase the number of trips, reduce the cost of operations, and make possible lower prices to the consumer.

The list of technological developments which might be furthered by carefully developed research projects at the present time could be indefinitely expanded. The Germans, for example, have succeeded in evolving a method by which the tunny, which I take to be a European species of tuna, can be caught successfully with an electrified fishing line. German experiments along other lines have shown that dispersed cod and herring can be assembled in front of trawl net openings in the ocean by properly applied electrical currents. Quoting Dr. Norman: "The time may come when fish will be driven electrically to the mouth of a great suction pump and pumped directly to the conveyors of fish-processing and fish-freezing equipment."

To develop and increase markets for fishery products, much more data than is now being collected would be helpful in determining the proper utilization of our salt-water and fresh-water fishery resources. Surveys could usefully be made, too, of the distribution of fishery products in order to determine the changes in marketing since the advent of frozen packaged fish and shellfish products.

Among the educational projects beneficial to the industry which a lack of funds precludes at this time is the development of new uses for the underdeveloped and less popular species, both fresh water and salt water, so as to provide year-round employment and stabilize market prices for the fisherman, processors, marketers, and consumers of domestically produced fishery products. In addition much can be done to enlarge general appreciation of seafood products by teaching more people what they are and how to prepare them. In recent correspondence,

which the Secretary of Agriculture in regard to the wider distribution of scallops a seafood product which is now in superabundant supply, the Secretary pointed out the importance of existing taste preference. Scallops, as all of us who have tasted them know, are a delicious seafood, and it is inconceivable that there would today be a glut of scallops on the market if more people were familiar with them and knew how to prepare them.

In concluding, Mr. Chairman, I would once again like to emphasize that sustained long-range research is essential to make it possible for fisherman to maintain continuity in supplies to their markets. The cost savings brought about by increased efficiency would in turn make possible savings to the consumer. This, I submit, is the one truly sound basis on which the domestic fishing industry can hope in the long run to compete successfully against imports of fishery products.

Mr. Chairman, I very much appreciate this opportunity to appear before your committee and I sincerely hope that it will report favorably on S. 2802, with such perfecting amendments as these hearings may indicate to be desirable.

Mr. BONNER. I want to compliment the witness for the excellent statement made this morning.

Mr. NORBLAD. We thank you very much and we hope you have learned something that you can bring back to your people.

Mr. Wells.

STATEMENT OF ORIS V. WELLS, ADMINISTRATOR, AGRICULTURAL MARKETING SERVICE, DEPARTMENT OF AGRICULTURE

Mr. WELLS. I should like to say before starting to read this statement that I hope you and other members of the committee will realize that my sympathies are with the fisheries despite what I may say in the statement, in the first place. In the second place, we had five bills to deal with.

Mr. NORBLAD. Will you identify yourself for the record?

Mr. WELLS. My name is Oris V. Wells, Administrator of the Agricultural Marketing Service of the Department of Agriculture.

Mr. NORBLAD. Thank you.

Mr. WELLS. I say despite any statement which is adverse, I am in sympathy with the fishery industry and with research. Secondly, we had five bills with somewhat diverse purposes and we have attempted to prepare a statement to cover all of them.

This statement is in response to a request from the chairman for the views of the United States Department of Agriculture relative to the various bills now before the committee "to further encourage the distribution of fishery products, and for other purposes."

These bills would amend the act of August 11, 1939 (Public Law No. 393, 76th Cong.). Under section 32 of the Agricultural Adjustment Act, an amount equal to 30 percent of gross customs receipts, together with certain carryover balances, is made available annually to the Department of Agriculture for the removal from the market of agricultural surpluses including fishery products, and for the general purpose of expanding markets for agricultural commodities. Section 1 of Public Law 393 authorizes the Department of Agriculture to use each year from section 32 funds an amount not in excess of $1,500,000 for the purchase and distribution, through public and private relief channels, of surplus fishery products. Section 2 authorizes the Secretary of Agriculture to transfer annually to the Department of the Interior $175,000 of section 32 funds of which $75,000 shall be used to conduct a fishery educational service and $100,000 to develop markets for fishery products of domestic origin.

The several bills before the committee would amend section 2 of the act of 1939 referred to above. Three of these bills would require that each year the Secretary of Agriculture transfer to the Secretary of the Interior an amount of section 32 funds equal to 30 percent of the gross receipts from duties collected under the customs laws on fishery products. These moneys would be used by the Secretary of the Interior for conducting fishery educational and research programs, as a means of developing and increasing markets for fishery products. The Secretary of the Interior would be further authorized to retransfer funds available under this amendment to the Secretary of Agriculture to be used for the purchase and distribution of surplus fishery products under section 1 of the original act.

The amount of section 32 funds required to be transferred from the Department of Agriculture to the Department of the Interior would be equal to 30 percent of the customs receipts collected on fishery products. Based upon annual customs collections since 1939, this sum would have ranged between $612,000 and $3,164,000. For the last 4 or 5 years, Mr. Chairman, the range would have been from something under $2 million to over $3 million and I have a table showing that by years if you would like to have it.

(The table referred to is as follows:)

Removal of surplus agricultural commodities—Estimated duties and import taxes collected by tariff schedules by calendar year—Fish and fish products

Year	717, fresh fish	718, fish prepared, etc.	719, pickled fish	720, smoked fish	721, other fish	Total
1938	1,033,734	2,254,196	815,898	115,929	548,933	4,768,690
1939	1,021,149	2,958,700	539,331	82,462	808,943	5,410,585
1940	1,028,108	1,625,809	542,889	81,299	620,990	3,899,095
1941	933,396	915,911	444,908	101,635	368,688	2,764,538
1942	1,042,451	292,518	422,906	85,579	195,371	2,038,825
1943	1,183,935	454,525	486,424	84,214	35,485	2,238,583
1944	1,263,387	1,016,361	422,627	128,376	30,498	2,861,249
1945	2,048,240	2,208,691	417,066	148,217	160,024	4,982,238
1946	2,084,895	3,781,672	633,886	202,526	283,847	6,986,826
1947	1,823,252	3,170,143	499,685	101,324	250,432	5,844,836
1948	2,014,943	4,129,169	464,376	95,466	317,803	7,021,757
1949	1,965,070	3,036,154	472,233	99,291	660,762	6,233,510
1950	2,804,115	6,125,693	490,198	114,221	1,013,300	10,547,527
1951	3,477,931	3,650,811	501,215	103,777	724,361	8,458,095
1952	4,147,659	4,809,160	494,244	95,056	720,694	10,266,813
Total	27,872,265	40,429,513	7,641,886	1,639,372	6,740,131	84,323,167
1953, January through November	3,260,846	5,546,153	394,227	88,369	1,090,575	11,380,170

Source: From Bureau of Customs, Treasury Department, the amount of customs duties is calculated on the basis of reports of the Bureau of the Census showing the quantity and value of merchandise imported. These reports are confined to commercial entries, therefore, total collections are somewhat less than the actual collections reported by collectors of customs.

For the current fiscal year, this 30-percent provision would have resulted in the transfer of approximately $3 million (which is the specific sum provided in H. R. 4303).

The Department of Agriculture cannot approve these bills, inasmuch as we are strongly opposed to the mandatory assignment of section 32 funds for use in connection with any particular commodity or product, including fishery products. The main purpose of section 32 programs is to increase the consumption of surplus products through direct purchase for distribution outside normal channels of trade, through

encouragement of exports, through diversion to byproducts or other new or additional uses, and various other means (for example encouraging the increased normal use of plentiful foods during certain seasons). The Congress has further indicated that section 32 funds shall be used principally for perishable products rather than for those major farm commodities which are subject to mandatory price support.

In effect the Congress has provided for a very flexible program, vesting considerable administrative discretion in the Secretary of Agriculture, and we believe that this should be continued. In our opinion the distribution of surplus foods should be carried forward through an orderly machinery, administered by one department of the Federal Government both in the interest of efficiency, and of preventing duplication as among various distributive agencies and confusion at the local level.

What we are saying is that we are not entirely clear whether such funds that might be transferred would be included in the $1,500,000. There might need to be some clarification on that.

Section 2 (a) of several of the bills before the committee does, however, raise a separate question from the purchase and distribution matters discussed above. This section provides that the section 32 funds which are to be transferred to the Secretary of the Interior shall be used for conducting a fishery educational service and fishery technological, biological, and related research programs in such a way as to assist in increasing markets for fishery products of domestic origin. The Department of Agriculture is not opposed to such activities as these. And as already indicated, current statutes do provide for the transfer of $175,000 of section 32 funds each year to the Secretary of the Interior for education and market development.

But if this work needs to be increased, we do raise the question as to the most appropriate method of providing the necessary authority and funds. Customs and receipts especially from particular products vary from year to year whereas research and education are as a rule the kind of activities which need to be built up gradually, after which they should be maintained for a considerable period of time at a fairly stable level. As a result, we feel the committee should consider whether it would not be more desirable to provide for such activities through the regular appropriation structure, which is the manner in which most research and related educational activities are now financed.

So far as I know, section 32 funds are not generally used for research purposes in the Department of Agriculture, but are used for market development and programs of one kind or another for the removal from the market of agricultural surpluses, including fishery products, such as the school-lunch program.

We realize the point has been made that some section 32 funds have been returned to the General Treasury. But we do call the committee's attention to the fact that section 32 expenditures for the current fiscal year as well as prospective section 32 expenditures for the coming fiscal years are in excess of the new funds available so that the section 32 carryover is now being reduced.

Our estimates are that we will spend $16 million more in the fiscal year beginning this July 1.

In conclusion, the United States Department of Agriculture believes that legislation in accordance with any of the several section 32 fishery

bills now before the committee would constitute a substantial step toward fragmentation of the section 32 appropriation and must as a result, recommend against enactment of such legislation.

Mr. NORBLAD. On the first page of your statement you refer to the fact that the Secretary of Agriculture is authorized to transfer annually to the Department of the Interior $175,000 to conduct a fishery educational service and to develop markets for fishery products of domestic origin. How much has actually been transferred to the Department of the Interior for those purposes?

Mr. WELLS. The specific provision is that the Department of Agriculture may use up to $1,500,000 each year for the purchase and distribution of surplus fishery products, out of which $175,000 may be transferred to the Department of the Interior, of which $75,000 shall be used to conduct a fishery educational service. I think I am correct in saying the $75,000 has been transferred each year since that provision became effective.

Mr. NORBLAD. Has the $1,500,000 ever been transferred?

Mr. WELLS. The provision does not provide for the transfer of $1,500,000. The provision is that the Secretary may use each year from section 32 funds an amount not in excess of $1,500,000, for the purchase and distribution of surplus fishery products.

Mr. NORBLAD. The Secretary of Agriculture?

Mr. WELLS. Yes.

Mr. NORBLAD. Has that been used?

Mr. WELLS. We have not purchased surplus fish since 1940. Perhaps the first year it was used, but not since World War II. No fish has been purchased the last several years. The only research we do under section 32 is in connection with school-lunch programs and things of that sort.

Mr. NORBLAD. You do marketing research?

Mr. WELLS. Only as directly related to the movement of surpluses.

Mr. NORBLAD. Is it fair to say that the Department of Agriculture is sympathetic to the aims we are trying to reach but they do not want section 32 funds touched?

Mr. WELLS. The Department of Agriculture is sympathetic to research and to market development activities but we are raising the question as to whether it would not be better to finance research through the regular appropriation route rather than the diversion of section 32 funds.

Mr. NORBLAD. In other words, Agriculture is jealous of its section 32 funds?

Mr. WELLS. Not precisely. I think we would argue that section 32 funds should be used chiefly for surplus movement programs rather than a research program; yes, sir.

Mr. ALLEN. Mr. Wells, what other commodities are you afraid would come in? You said you were afraid other commodities would come in.

Mr. WELLS. There are many commodities which contribute to tariff revenues outside the fisheries field.

Mr. NORBLAD. Are they all getting research funds, these other commodities?

Mr. WELLS. I have just been before the House Appropriations Committee and we are asking for research increases, but we are asking for them under the regular appropriations.

Mr. ALLEN. I think the statement was made that the gross value of fishery products was about $1 billion a year. What is the gross value of agricultural products?

Mr. WELLS. $35 billion.

Mr. ALLEN. So agriculture is about 35 times the value of fishery products?

Mr. WELLS. Yes, sir. Or I think more than that perhaps if figures were adjusted.

Mr. ALLEN. Do you know what the revenue from section 32 funds is now? That is, the 30 percent of gross tariff duties?

Mr. WELLS. It has been running for the last couple years between $170 million and $180 million.

Mr. ALLEN. On the present basis of $180 million total, do you know what the gross revenues from tariff duties are?

Mr. WELLS. They must be around $540 million to $580 million a year.

Mr. ALLEN. If we wanted to provide for the fishery industry and products in exactly the same way that agricultural products are now provided for on some basis similar to section 32, how would we go at it to keep those two industries in exactly the same position with agriculture 35 times as big as fisheries? How would you go at it?

Mr. WELLS. It seems to me they are two separate problems. If you are dealing with the purchase and distribution of surplus fishery products, which is what section 32 funds are for, I think the section 32 argument has more force than if you are dealing with research. What I am saying is that in the Department of Agriculture for our research we go before the Appropriations Committee and ask for the funds. Of course we first go to the Bureau of the Budget, and if they approve it, we then go to the Committee on Appropriations.

Mr. ALLEN. Would Agriculture agree to a proposition roughly like this: That it could take 30 percent of the tariff revenues for its present activities under section 32 and on an exactly similar philosophy the fishery could take about 1 percent of the funds for a similar program?

Mr. WELLS. The law provides that $1,500,000 may be used for the purchase and distribution of surplus fishery products. What I am saying is that as a matter of general policy the Department of Agriculture has in the past and will, as far as I know, continue to argue against the fragmentation of section 32 funds.

Mr. ALLEN. I do not see how, in the statement of the Secretary to this committee, he could ask us to rely on the work that the Department is doing to promote the use of fish products and whatever else he says there, and still come along and say, "We do not want the fishery industry to get an even break with the agricultural industry." I do not think it is flattering to our intelligence.

Mr. WELLS. I think it is true that our people and the people in Interior have been working very well together. We have a plentiful foods program where each month we try to call to the attention of grocers all over the country the foods in plentiful supply.

Again each month, I think I am correct in saying that we receive advice from the Department of the Interior, say, through Mr. Anderson indicating what fishery products are in surplus supply, and we discuss and feature those along with the agricultural products and take steps to advise grocers and consumers as to those foods which are in plentiful supply. If we are going to have fishery products in

the school-lunch program or the plentiful foods program, anything associated with fish should be coordinated with the regular program, rather than carried on as a separate program.

Mr. ALLEN. Do you not agree that the charts which were shown yesterday indicate that the fisheries on the New England coast are just going down to a point near extinction? The fisheries crop is not harvested like agricultural crops. It does not clutter up the neighborhood like a fruit or a vegetable crop or something else that is harvested. Are we not doing for one program, trying to utilize or harvest that crop, and leaving the other completely neglected and unharvested, and letting the fishermen and the fishing industry go on to extinction, letting the fish die at sea instead of having fruit or other crops rot on the ground as they do in the case of agricultural products?

Mr. WELLS. Well, the arguments which have been advanced this morning certainly convince me that the fishing industry has many problems relative to the disposition of certain kinds of fish and the ability to catch too many of others.

Mr. ALLEN. If we leave the solution to the Department of Agriculture it would not be wholly solved with justice and to the satisfaction of the fishing industry——

Mr. WELLS. Well, sir, we are well aware of the fact that the basic determination rests with Congress rather than with the executive branch of the Government. We feel this is a problem, the solution of which ought to be outside of the already established agricultural program.

Mr. ALLEN. I understood from someone that the Secretary of Agriculture in a recent statement to Senator Saltonstall changed the statement which was originally made to this committee.

Mr. WELLS. It is my understanding that the Secretary assured Senator Saltonstall that the decision of the Department would be thoroughly considered before we presented our views which are before this committee.

Mr. ALLEN. The statement you now present to the committee is the reconsidered view?

Mr. WELLS. The statement which was sent to the Senate committee was identical with the statement which I read before this committee except as to the terms which referred to the numbers or names on the particular bills.

Mr. NORBLAD. It would seem to me, following Mr. Allen's question that possibly these fish import funds do not belong in Agriculture. Maybe the solution would be to divorce them altogether from Agriculture and give them to the Fish and Wildlife Service. That would probably be a proper solution of the whole thing. Do you agree to that, Mr. Wells?

Mr. WELLS. No, sir; section 32 properly has 30 percent of the general tariff revenues which are received, without reference to what imports these tariffs apply.

Mr. NORBLAD. Yes, I understand that, but as to those funds being used for fish research it seems to me that they are going into the wrong fund. They should be going to the Fish and Wildlife Service.

Mr. WELLS. We think this would constitute, first, a rather substantial step toward the fragmentation of the section 32 appropriation which we could not agree to.

Mr. NORBLAD. I do not think that there would be any fragmentation. It would just be putting the funds where they belong, in the Fish and Wildlife Service rather than in Agriculture. It is just a realistic policy, in my opinion.

Mr. Tollefson, do you have any questions?

Mr. TOLLEFSON. Yes. I must come to the conclusion that there is a fallacy in this fragmentation argument which you put forth. What you are doing down in the Department of Agriculture is listing 160 commodities as agricultural.

Mr. WELLS. No; I say that we have one hundred and sixty-odd commodities which want more research conducted on them.

Mr. TOLLEFSON. You are willing to segregate those, but you lump all of the fisheries products in one group.

Mr. WELLS. No; we are not segregating the 160 either. Those are commodities which want more research.

Mr. TOLLEFSON. I think the position that Mr. Norblad takes is that we ought to segregate these products under one product, fisheries products. There is no fragmentation involved in it except in that respect.

Mr. WELLS. In essence that is what these three bills which we have been discussing do. I think that each importer before going to the tariff revenues may very well say we would like to have special work done with respect to our commodity, with respect to our commodity or industry, or whatever it might be.

Mr. TOLLEFSON. You are falling back to that old policy statement again; you are splitting up agriculture, but not fisheries. They are on a different kind of footing.

Mr. WELLS. We would not recognize this argument in connection with agricultural commodities——

Mr. TOLLEFSON. I do not think it is very good.

Mr. WELLS. We would tell those people that these research funds must come as a result of a direct request where we discussed the needs for research in agriculture.

Mr. ALLEN. I was trying to go back to your theory on the Bates bill, and thinking about just dividing these up on the value and the needs of the fisheries industry against the needs of the agricultural industry, taking the two parallel programs. I would like to know what is wrong with that philosophy, and then, perhaps, having legislation afterwards.

Mr. WELLS. As part of the agricultural program Congress enacted section 32 which is an arrangement which provides for the use annually of 30 percent of the tariff revenues together with certain carry-over balances for the removal from the market of agricultural surpluses, including fishery products, and for the purpose of expanding markets for agricultural products.

In effect what we are dealing with here is an indirect appropriation, and it is our general feeling that if you are talking about the distribution of surplus commodities that you need one system with which to do that.

Now, if you are talking about research it is our feeling that the basic research and educational services should go direct to the proper congressional committees and ask for appropriations after securing authorization from the subject matter committee in Congress.

Mr. ALLEN. But it works out that we have probably about one and a fraction percent of the total revenues for the fishing industry. We ought to have no revenues for either the fishing industry or agriculture on the same philosophy, is not that correct?

Mr. WELLS. I can understand your viewpoint.

Mr. TOLLEFSON. The Department of Agriculture now and for some years, has been transferring $175,000 to the Fish and Wildlife Service?

Mr. WELLS. As provided by the Congress, yes, sir.

Mr. TOLLEFSON. And the $100,000 is for what purpose?

Mr. WELLS. The $100,000 is to develop markets for fishery products of domestic origin.

Mr. TOLLEFSON. What is the $75,000 for?

Mr. WELLS. For conducting fishery educational service.

Mr. TOLLEFSON. Would you have any objection to those figures or amounts being increased? What would your position be with respect to just increasing the amount of those figures?

Mr. WELLS. We would object, based on the same general policy, which is that the Department objects to setting aside section 32 funds for special purposes.

Mr. NORBLAD. There you would have fragmentation?

Mr. WELLS. We would object. It is a further fragmentation.

Mr. TOLLEFSON. What objection would you have to increasing the $175,000 figure for the very same purposes which are set forth in section 32 now?

Mr. WELLS. That raises the question as to whether it would not be more desirable to go through the regular appropriation structure to secure those funds.

Mr. TOLLEFSON. But what objection would you have to increasing the $175,000 a year to, say, $500,000 a year and not change the law in any other respect? What would be your view with respect to that, Mr. Wells?

Mr. WELLS. All I say is that in a small way it does what the whole 30 percent transfer does.

Mr. TOLLEFSON. But you still do not answer my question. I am trying to find out what your view would be with respect to increasing the $175,000 a year to some other figure, say, $500,000, without changing the present section 32?

Mr. WELLS. We would be opposed to it.

Mr. TOLLEFSON. Why?

Mr. WELLS. Because it represents a further fragmentation of the section 32 appropriation, and the three bills proposed today would transfer 30 percent of the revenues, or about $3 million a year.

Mr. TOLLEFSON. No; I am not talking about the new proposal, let us forget that. Let us talk about section 32. Section 32 now provides that $175,000 may be transferred to the Fish and Wildlife Service. Suppose we had a law here which did nothing else but increase that amount, would you object to that?

Mr. WELLS. You do have one bill here that does exactly that. It provides $3 million a year, and another one provides $1 million a year.

Mr. TOLLEFSON. But it also provides for a different type of work to be done.

Mr. WELLS. Yes, sir; these bills provide for a general research program, which these transfers do not.

Mr. TOLLEFSON. Unless you also take the view that you do not think the Fish and Wildlife Service should have more than $175,000 for the purposes which are set forth in section 32 now, what would be wrong with making that amount $200,000 a year instead of $175,000?

Mr. WELLS. The same general policy would apply. We would have objection to setting aside section 32 funds for any special purpose.

Mr. TOLLEFSON. But you are already doing that. Are you opposed to the $175,000 which is provided?

Mr. WELLS. No, sir; Congress did it, not the Department of Agriculture.

Mr. TOLLEFSON. You were opposed to it at the outset, and you are still opposed to it?

Mr. WELLS. Yes; we are opposed to it still. We recognize the authority of Congress to do it, Mr. Congressman.

Mr. TOLLEFSON. Surely.

Of course, the agriculture bloc does a lot of things. Under section 32 you can use $1,500,000 for the purchase and distribution, through public and private relief channels, of surplus fishery products. Have you ever done it?

Mr. WELLS. No, sir; not since 1940.

Mr. TOLLEFSON. That was the first year that the act was in effect?

Mr. WELLS. There were some purchases, as I remember, in 2 years under the old 1938 authorization, and then for some reason in connection with the general discussion of this special legislation I was under the impression we purchased fish in 1940, but none since then. May I say that the $175,000 comes out of funds from section 1.

Mr. TOLLEFSON. It does?

Mr. WELLS. Under section 1 the Secretary of Agriculture may use $1,325,000 for purchases.

Mr. TOLLEFSON. $1,325,000?

Mr. WELLS. $1,325,000, yes.

Mr. TOLLEFSON. And outside of 1940 you have never used any of that fund?

Mr. WELLS. No.

Mr. TOLLEFSON. That is because there has been no fishery surplus, I suppose?

Mr. WELLS. No, I think the chief reason has been the feeling that we had better encourage the school lunch authorities to purchase fish which move through regular commercial channels. The handling, including the refrigeration and the widespread use of those products in a program such as that, offers some difficult problems in that connection.

Mr. TOLLEFSON. I understood you to say you were spending about $260 million a year in marketing programs and in marketing development.

Mr. WELLS. No, in surplus distribution activities, most of which is for the purchase of surplus commodities. We are estimating about $240 million in fiscal year 1955.

Mr. TOLLEFSON. About $240 million?

Mr. WELLS. Yes. Practically all of that is for purchases, plus the actual movement and the handling of the commodities.

Mr. TOLLEFSON. The way you stated it, I understood you to state that you were spending that amount of money to encourage the use of fishery products.

Mr. WELLS. No; to encourage the use of agricultural products.

Mr. TOLLEFSON. You made a point of the fact that you have extra expenditures this year so that there will not be any funds turned back, comparable to the $28 million which you turned back last year.

Mr. WELLS. Section 32, as amended, provides that the Secretary of Agriculture may carry over and accumulate not in excess of $300 million of section 32 funds from one year to the next, with the result that we did turn back last July 1 about $27 million, because we had accumulated $327 million in the fund, whereas the law says that we cannot carry over $300 million, but this year and next year we are spending more than we are getting in.

Mr. TOLLEFSON. One reason for your extra expenditure this year probably would be necessitated by the huge agricultural surpluses which you have on hand, and which require some action.

Mr. WELLS. Yes, sir; that is correct.

Mr. TOLLEFSON. Now, just for the record, from your statement you do not have any opposition to the Department of the Interior engaging in any research program. I think your statement says that?

Mr. WELLS. No. Referring to Under Secretary Morse's letter, which is before the committee, we want that correlated with certain general research that we do in the field of nutrition, but I think that our technicians are working together very well in Interior and Agriculture.

Mr. TOLLEFSON. Your statement on page 3 says:

> The Department of Agriculture is not opposed to such activities as these—

having reference to the fishery educational service, the fishery technological, biological, and related research programs. Your are not opposing the Fish and Wildlife Service doing that?

Mr. WELLS. No, indeed.

Mr. TOLLEFSON. You just do not want them to get any more of these section 32 funds?

Mr. WELLS. That is correct.

Mr. TOLLEFSON. I think that is all, Mr. Chairman.

Mr. NORBLAD. Mr. Tollefson was talking to you about these support prices with reference to the fishing industry. I think the fishing industry could have piled up tremendous surpluses in my areas had they not shut their boats down as imports piled up and lived on a supply and demand basis, which is quite different from agriculture.

Mr. ALLEN. Mr. Chairman.

Mr. NORBLAD. Mr. Allen.

Mr. ALLEN. I notice this statement on the first page of your statement:

> Section 2 authorizes the Secretary of Agriculture to transfer annually to the Department of the Interior $175,000 of section 32 funds of which $75,000 shall be used to conduct a fishery educational service and $100,000 to develop markets for fishery products of domestic origin.

Do you use some of these section 32 funds to conduct an agricultural education service?

Mr. WELLS. Yes. We conduct what we call a plentiful foods program where we do try to call attention of the grocerymen and the consumers to the foods which are in plentiful supply or surplus.

Mr. ALLEN. How much do you spend on that?

Mr. WELLS. I do not know offhand how much we spend on that. I would have to look it up for you.

Mr. ALLEN. Would it be in excess of $2,600,000?

Mr. WELLS. No, indeed. I would think, offhand, that it would be closer to $200,000 or $300,000.

Mr. ALLEN. Almost the same, or a little more than you spend on fisheries?

Mr. WELLS. In connection with that program we give equal emphasis on fisheries. We get each month, from the Department of the Interior recommendations as to surplus fishery products, to include in our bulletins and announcements as to foods which are in plentiful supply and surpluses.

Mr. ALLEN. How much do you spend to develop markets for agricultural products of domestic origin?

Mr. WELLS. That would be hard to say. In marketing I would say we spend from $500,000 to $600,000, but from other Department of Agriculture funds we spend very considerable sums for that purpose.

Mr. ALLEN. Can you tell what the total expenditure for the development of markets would be?

Mr. WELLS. The Agricultural Marketing Service, of which I am the Administrator, is now before the Congress asking for an appropriation of something in excess of $20 million; for research, statistical, and general economic services, about $10 million; about $10 million for grading and inspection of agricultural products, the Market News and related services. We have a Foreign Agricultural Service which deals with foreign markets, which is currently asking for, I think, about $1 million in rough figures.

Mr. ALLEN. Is there any other fund that is used, other than this $100,000, to develop markets for fisheries products?

Mr. WELLS. No, not to my knowledge. The Department of the Interior may be able to give a more direct answer to that. What they use from regularly appropriated funds, I am not aware.

Mr. ALLEN. Can anyone here from the Department of the Interior tell me?

Mr. ANDERSON. The only funds we use for developing markets come from Agriculture, the $100,000.

Mr. ALLEN. Then, it would appear that you are using $20 million to develop markets for agricultural products, and $100,000 to develop markets for fisheries products. That is a ratio of 35 to 1, which is a little out of place.

Mr. WELLS. Let me point out to you, Mr. Allen, that that $20 million to which I refer includes all of our marketing requirement, all of our crop and livestock estimating and statistical services. It also includes the Marketing News Service and a great deal of inspection and classification service. These are our total expenditures which can by no stretch of the imagination be called market development.

Mr. ALLEN. Is it not true that the $100,000 for fisheries includes all of this service for fisheries?

Mr. WELLS. I would assume that the Department of the Interior has carried on research activities for years from their regular appropriations every year. There is a Marketing News Service which has funds over and above that.

Mr. ALLEN. You cannot give me a comparable figure for Agriculture to develop markets for agriculture which is comparable to this $100,000?

Mr. WELLS. No, I could not.

Mr. ALLEN. Would you hazard a guess that it is more than $3,500,000?

Mr. WELLS. In terms of the $100,000 mentioned, or the general educational area, I would hazard a guess that our expenditure would be considerably less than $3 million.

Mr. BONNER. How much annually do you get from fishery products?

Mr. WELLS. It has ranged probably from a little less than $6 million to slightly more than $11 million in gross customs receipts

Mr. BONNER. Between 6 million and 11 million dollars for your section 32 funds?

Mr. WELLS. Yes, that is the gross customs receipts.

Mr. BONNER. Then you had accumulated $300 million last year?

Mr. WELLS. We had, as of last July 1, $327 million.

Mr. BONNER. Which was accumulated over what period of time?

Mr. WELLS. I could not tell you offhand. It was during the period of the world food crisis.

Mr. BONNER. Say 10 years?

Mr. WELLS. I am not sure when the $300 million accumulation feature of the law was passed. I was thinking that came into the law in 1948, but I would have to check that for the record.

Mr. BONNER. Was it about 10 years?

Mr. WELLS. Well, 5 or 6 years.

Mr. BONNER. That would be about 60 to 100 million dollars from fisheries products. How much would be in that accumulation from fisheries products over that period of time?

Mr. WELLS. I could not tell you offhand.

Mr. BONNER. Say $6 million to $11 million annually?

Mr. WELLS. No, this is 30 percent of the revenues, not the total revenues. It would run between $2 million and $3 million annually. I do not know the dollars and cents amount, but the answer would be that the $300 million came from general tariff revenues, so that fisheries contributed whatever proportion they contributed to the tariff revenues, probably 2 or 3 percent.

Mr. BONNER. But you are using revenues that come from fisheries products in your section 32 funds for agriculture.

Mr. WELLS. Yes, 30 percent of them.

Mr. BONNER. And you are not willing to use more than this little pittance for the real source from which it comes.

Mr. WELLS. Well, I guess the answer is, "Yes."

Mr. BONNER. That is just it, is it not?

Mr. WELLS. Yes, I think that is correct.

Mr. BONNER. I do not want to be wrong about it; I just want to be right about it.

Mr. WELLS. We look upon the section 32 funds as general funds.

Mr. BONNER. I am tremendously interested in agriculture.

Mr. WELLS. Surely.

Mr. BONNER. But I do not think agriculture ought to do it on some other product's revenues which are brought to its assistance if we are going to work on this basis.

Mr. WELLS. The point I am trying to make is that all tariff revenues originate with some particular product coming into the country, and that section 32 is the general fund for a specific type of program.

Mr. BONNER. Just tell me what products those funds come from.

Mr. WELLS. They come from tariffs on all products which are imported into the United States, whether they be lead, zinc, fishery products, or whatever they may be.

Mr. NORBLAD. Diamond rings and everything?

Mr. WELLS. It is 30 percent of all the tariff revenues, yes, sir.

Mr. BONNER. But we are only speaking about food products here.

Mr. WELLS. Yes.

Mr. BONNER. And the people from New England who testified here spoke of the surpluses that they have at the present time.

Mr. WELLS. Yes, they have.

Mr. BONNER. And you are not buying any of it?

Mr. WELLS. That is correct.

Mr. BONNER. Or using any of the section 32 funds to reduce the surpluses they complain of, is that right?

Mr. WELLS. We have not in the past, Mr. Bonner. I cannot say we will not in the future.

Mr. BONNER. All we can judge the future by is the past. You have not done anything to help them in the past, and unless you tell me that you are, you are not going to help them in the future.

Mr. WELLS. No, I am not saying that we will not in the future. If there are surplus items which we find it feasible to move in the school-lunch program or the distribution of plentiful food programs, products which people want at the State level and we can make it an economical operation, we would certainly consider handling fishery products.

Mr. NORBLAD. If you do the Columbia River bottom fishermen would be very much interested in knowing that they could start up operating again.

Mr. WELLS. I am saying we would be willing to consider it.

Mr. NORBLAD. Is there anything else?

Mr. BONNER. Why did you turn back the $27 million to which you have referred?

Mr. WELLS. The law provides that these funds may be accumulated and carried forward from year to year to the maximum extent of $300 million. At the end of the fiscal year we had $327 million accumulated so, the amount in excess of $300 million automatically reverted back, or $27 million.

Mr. BONNER. There is one other thing I would like to inquire about.

In dealing with foreign markets you offer American products which are in surplus at the international market price, do you?

Mr. WELLS. We offer some surplus products at the international market price, and some we do not.

Mr. BONNER. When a foreign country buys down under that international market price you do not come down with it, do you? It is a question I have been asked about, and I have an opportunity here to get the "horse's mouth" to tell me just what it is. Now, go ahead and tell me. You understand what I mean?

Mr. WELLS. The world international market price for a commodity is, in considerable part, a fiction because it is obvious what people are willing to sell at.

Mr. BONNER. You have wheat at a price.

Mr. WELLS. On wheat we have an arrangement which substantially allows us to meet world competition. In the case of cotton we do not have.

Mr. BONNER. But you do not meet it.

Mr. WELLS. In wheat?

Mr. BONNER. Yes.

Mr. WELLS. Yes, we will sell to any place in the world wheat at the International Wheat Agreement price.

Mr. BONNER. Yes, of course you will, but where some other country comes down below that you do not meet that price?

Mr. WELLS. We will on occasion endeavor to do so.

Mr. BONNER. You have not met it, have you?

Mr. WELLS. We have had our difficulties in several cases.

Mr. BONNER. Now, I want to ask you about dairy products.

Has it not been said that we will not meet the price that is offered on dairy products abroad, that we are going to let some other country have them, so we are not going to move our dairy products in that area?

Mr. WELLS. In the case of dairy products the Commodity Credit Corporation, which is the organization holding these stocks, offers dairy products in the domestic and foreign markets at the same price, which is actually above the going price in the United States.

Mr. BONNER. But you do have to meet competition abroad?

Mr. WELLS. That is correct.

Mr. BONNER. So, therefore, it is stored up here in great stocks here in America, and we have lost the opportunity to sell abroad at the competitive price?

Mr. WELLS. To some extent.

Mr. BONNER. That is the answer; you have done that?

Mr. WELLS. To some extent.

Mr. BONNER. And that has brought about this great storage of dairy products.

Mr. WELLS. I think the great storage is largely due to a reduction in consumption in the United States.

Mr. BONNER. And you would have moved some of it if you had met that competition?

Mr. WELLS. Some small part of it might have been moved, in my opinion.

Mr. BONNER. And you could have used some of these funds for that purpose?

Mr. WELLS. We could have.

Mr. BONNER. But you let them accumulate up to this $300 million by not using them?

Mr. WELLS. Most of our dairy surplus has been built up during the last year, but these funds are available to encourage exports of agricultural commodities and other things.

Mr. BONNER. But what I say is true, nevertheless?

Mr. WELLS. Yes; that is right.

Mr. NORBLAD. The chairman is in receipt of a letter of transmittal and a statement from Congressman Philip J. Philbin of Massachusetts; a statement from Congressman Thomas M. Pelly of Washington; a statement from Charles E. Jackson, general manager of the National Fisheries Institute, Inc., Washington, D. C.; and a statement from Congressman Robert F. Sikes of Florida which will be included in the record at this point.

(The matter referred to is as follows:)

STATEMENT OF CONGRESSMAN PHILIP J. PHILBIN ON H. R. 7641

I am very thankful indeed to this distinguished Subcommittee on Fisheries or the opportunity briefly to present my views in behalf of this bill, H. R. 7641.

In the first place, I must wholeheartedly commend and thank my able and distinguished colleagues, Congressmen Bates, Lane, and O'Neill, for their foresight and zeal in pressing this vital subject matter to the attention of the members of the subcommittee and the Congress.

I think that most of the distinguished gentlemen on this subcommittee, who are so well experienced on public questions and public affairs, are fully informed concerning the need for and desirability of this legislation.

Time was when the fishing grounds off the New England coast were virtually alive with edible fish. In those days, it was relatively easy for fishermen, individually or in fleets, to visit fishing grounds, not too far from the shore, and return with a large catch. The supply of fish was plentiful and there was no problem presented to the industry of possible scarcity of supply. However, for one reason or another, because of the changes in ocean currents, climatic conditions, the migration of many kinds of fish, and the exhaustion of the fishing banks, the former plentiful supplies of fish have now been greatly reduced.

As you have undoubtedly observed from the evidence presented this situation presents a grave threat, not only to the fishing industry, but to the consumers of America. Many people derive their livelihood from this great business. A very large number of people depend upon fish as a source of basic food, not only palatable, but a basic source of nutrients and vitamins recommended by dietary experts as essential parts of a well-balanced diet. Thus, in the depletion of historic fishing banks and sources, the Nation is confronted, not only with economic debilitation and loss of business revenue, decrease of employment in the fishing industry, but also is faced with the prospect of decreasing supplies of necessary and very essential foodstuffs.

It is believed that only through the research facilities provided by this bill, which are designed to look into all phases of current fishing shortages, that appropriate solutions and remedies can be found to ameliorate existing alarming conditions.

The cost to the American taxpayer is almost negligible, so to speak, the money provided for research coming from available and unused funds. H. R. 7641 and companion bills seek an annual allocation of section 32 import funds for intensive research to insure adequate supplies of fish now and for the future, experimentation on new uses for fish and seafoods, and more extensive use of various species of fish not now used in the fish-marketing programs.

We all know that the Department of Agriculture is not spending all of the section 32 funds presently received on imported food products. All that this bill seeks is a transfer of a portion of these funds to the United States Fish and Wildlife Service for research vitally needed to maintain our commercial fish industries.

The money sought is actually a very small amount, as compared with the total sum provided by the Congress for research in the field and, if measured by the results that could be achieved in forestalling the loss of vital fish supplies and rehabilitating an industry that is threatened with serious dislocation.

The subcommittee will hear later today testimony from a distinguished group of witnesses from Massachusetts, who are vitally interested in this legislation. I know the subcommittee will render them a courteous and fair hearing because these witnesses are experts in their field.

They include Mr. Thomas A. Fulham, vice president of Fulham Bros., Inc., treasurer of the Boston Fish Market Corp., chairman of the board of advisers, panel 5, International Northwest Atlantic Fisheries Commission, and a member of the Massachusetts Board of Natural Resources; Francis W. Sargent, director of the Division of Marine Fisheries, Massachusetts Department of Natural Resources, and International Northwest Atlantic Fisheries Commission; John Kaylor, secretary-treasurer of the New England Fisheries Technologists; and Thomas D. Rice, executive secretary, Massachusetts Fisheries Association, sec-

retary of the Federated Fishing Boats of New England and New York, Inc., and a member of the advisory board, Boston Port Authority Commission.

I would like to join my conscientious, capable, and discerning colleagues, Congressmen Bates, Lane, O'Neill and others, who are alined with them in this matter, in urging the favorable consideration of the subcommittee upon this bill. I hope that you will be disposed, after you have fully considered all the important aspects of the question, to report this bill unanimously so that it can be speedily adopted by the Congress and appropriate relief can be rendered, not only to the fishing industry and its workers, but to the consumers of America and to the great cause of conserving our great natural resources for the benefit and use of our people.

STATEMENT OF CONGRESSMAN THOMAS M. PELLY

Mr. Chairman and members of the subcommittee, I deeply appreciate the opportunity to appear before you in support of H. R. 7641, which I understand is a companion bill of S. 2802. This legislation is of paramount importance to one of the most important, if not the most important, industries of the Pacific Northwest and Alaska. The salt-water fishing industries are a vital part of the economy of the city of Seattle which I have the honor to represent.

In recent years the salt-water fishing industry as a whole has suffered. This has been particularly true of the salmon industry, the runs of which have become so depleted that in Alaska it has become necessary for the Director of the Fish and Wildlife Service to order a 50-percent reduction in fishing effort in 1954, thus adversely affecting the livelihood of thousands of fishermen.

Mr. Chairman, many other Members of Congress have appeared before you during these hearings. Each has said substantially the same thing. Something must be done to discover the cause of the depletion of our fish resources, and the legislation before you is fundamental to the restoration of a great industry. Representatives of all segments of this industry agree that research is absolutely essential.

On February 9, 1954, the Alaska Fishermen's Union published an excellent brief entitled "What Is Wrong With Alaska Salmon Fisheries." It is interesting to note that, in the opinion of this organization which represents hundreds of fishermen who know their business, research is the No. 1 road to a solution of this grave problem which concerns, directly or indirectly, the people of Seattle. The union has this to say about research:

"The first and foremost problem on our list is that of research. Of course, a a research program has been in operation right along but it has been totally inadequate when we consider the size of the Territory of Alaska and the problems which have to be solved. We need a considerable amount of extra money to carry out even the most necessary research for the protection of the fisheries. So far, the picture of the research work done in Alaska can be likened to a map which has several blank spaces in the most important fishing areas within the Territory. These blank spots must be filled out and the Fish and Wildlife Service should be in a position where they would know what is most needed and which problems should come first in this respect.

"There are some differences of opinion between us and the Fish and Wildlife Service in regard to allotment of funds, concerning which projects should have priority, etc. But we believe these to be honest differences which can be ironed out and we intend to deal with this subject later on. Generally, the funds allotted for fishery research have been so inadequate that it has been an impossibility for the Fish and Wildlife Service to conclude any certain project, be it research or otherwise.

"When we consider the immense area in Alaska to be covered by the Fish and Wildlife Service where conservation is in effect, we realize fully that with the funds at hand a fairly decent job has been done and, therefore, the aches and pains which we are experiencing in these fisheries today can mostly be attributed to lack of necessary money in the past.

"A few problems for which research is needed now are:

"(*a*) To determine to what extent predators levy a toll on salmon;

"(*b*) Adequate tagging in all districts;

"(*c*) Studies of fertilizing of lakes;

"(*d*) Fresh water survival studies;

"(*e*) Ocean survival studies;

"(*f*) Life histories of certain species of salmon which have not been properly investigated;

"(*g*) Adult spawning and fry survival;

"(*h*) The degree of mixing of Alaska and Asiatic stocks of salmon, etc."

Mr. Chairman, we of the Congress have a responsibility not alone to those who depend on the supply of fish for their living today, but also to the future food needs of our Nation. This matter before you now is our opportunity to do part of the job we face. A modest investment in research today will return a silver hoard of dollars and dividends in the years to come which through taxes will go right into the Treasury of the United States.

I strongly urge the committee to report H. R. 7641 favorably.

STATEMENT BY CHARLES E. JACKSON, GENERAL MANAGER, NATIONAL FISHERIES INSTITUTE, INC., WASHINGTON, D. C.

My name is Charles E. Jackson, and I am general manager of the National Fisheries Institute, 1614 20th Street NW., Washington, D.C.

As has already been stated by our president, Mr. Bundy, of Gloucester, Mass., our governing body, the board of directors, has unanimously gone on record in support of S. 2802, H. R. 7641, and other bills directed to the same principle.

To avoid repetition my remarks will be limited to only one phase of the program pertaining to fishery education and market development.

One of the problems in increasing fish sales is the development of new customers. There is a larger potential here than in expanding sales to regular customers. Many people do not know how to prepare fish properly so as to bring out its natural qualities, and others have prejudices toward fish that have grown from childhood. People remember the bones they had to pick out of the fish, or the messy job of cleaning the fish.

One of the most important potential markets for fishery products lies in increasing the use of such products in the school-lunch program. It is estimated that if each school child in this country were to be fed 1 meal per week, of fish, at the rate of the standard 2-ounce serving, approximately 150 million pounds of fishery products would be required during the school year. Not only would it bring to the children of this country a valuable source of delicious and nutritious food but it would also develop in the children an appreciation of the qualities of fishery products that would carry over into their adult lives when they will constitute the consumers of tomorrow.

The most important single reason why fish are not served more often, and why prejudices against fish are so often formed, is a lack of knowing how to properly prepare fish in order to bring out their best natural qualities. This lack of fish-cookery knowledge is true not only of the housewife but also of the persons responsible for preparing the schoolchildren's meals.

An important activity of the Fish and Wildlife Service is the program whereby trained home economists of the Service conduct fish-cookery demonstrations before the school-lunch cooks, managers, and administrators. An average of 135 of these demonstrations have been conducted annually. Since the program first started in 1946, about 725 demonstartions have been given in 36 States, to what is estimated to be personnel from 13 percent of the schools in this country. Limited as the coverage has been, its effectiveness has been demonstrated by postdemonstration surveys of the schools covered, in which the use of fish is compared after the Fish and Wildlife Service demonstrations to its use prior to the demonstrations. Increases of as much as 80 percent have been recorded.

There is a great need to increase the present coverage and the industry is hopeful that this legislation will be adopted so that this type of work may be expanded. It would permit the demonstrators to return to the States and conduct refresher courses for the new personnel who have joined the schools. With the limited funds now available, refresher courses are few and far between. In addition, advantage could be taken of the opportunity to extend the program to include the summer workshops which are held each year by the various States to acquaint school personnel with the latest developments in their respective fields. Cover-

age would also be extended to include the student home economists attending college, so as to acquaint them with the budgetary and dietary advantages of fishery products.

In conducting its school-lunch program, the Fish and Wildlife Service works directly with the State school-lunch director. Demonstrations are scheduled for central locations to which the personnel from adjoining areas are invited to attend. The program includes rural, urban, white, colored, and parochial schools. The usual attendance is about 50 persons, although as many as 250 have attended a single demonstration. The demonstration consists of the actual in-the-kitchen preparation of six appropriate recipes using local species of fish when possible. Contact with the local fish distributors is made prior to the demonstration by the fishery marketing specialists who accompanies the home economist. As a result of this predemonstration survey the Fish and Wildlife Service team can advise the school-lunch representatives of their best sources of good quality fishery products. The fish distributors are invited to attend, and are usually called upon to answer any local supply questions that the cooks and managers may have. In many instances, schools are now making local purchases and eliminating the added costs and time losses they previously encountered due to their lack of knowledge of local markets. Many of the distributors have arranged special-delivery schedules for the schools so as to meet their menu plans.

In between demonstrations the home economists develop new recipes at their headquarters test kitchens. These recipes are not only designed to be of appeal to the children but to fit the budgetary limitations of the schools and to take advantage of fishery items in best local supply. After being thoroughly tested, the recipes are printed as official Fish and Wildlife Service publications and distributed at the next series of demonstrations.

On the basis of the experience gained to date, the schools are eager for more fish cookery information and the principal reason for not serving fish regularly is their continued lack of knowledge as to the proper methods of preparation.

This program is of direct interest and benefit to the local dealers and distributors since the schools, in most instances, make local and recurring purchases. Even in areas where there is no regular fish dealer, the operators of frozen food locker plants, of which there are 11,000 in this country, benefit from the program. As a result of new customers, these plants are encouraged to stock increased quantities of frozen fishery products to sell to their regular locker patrons.

Mr. Chairman I would like to suggest an amendment so that there will be no question as to the term "fishery products."

In addition to "fish, shellfish, mollusks, and crustacea" mentioned in S. 2802 and similar House bills the term "fishery products" generally is understood to include marine animals such as whales, seals, etc.; aquatic reptiles such as turtles; aquatic plants such as kelp, Irish moss, and agar; and sponges. Research and activities of the Fish and Wildlife Service are concerned with all of these and the products derived from them.

Duties paid on such products in 1953 are estimated to be over $700,000. Thirty percent of this amount would be at least $210,000.

All of the above items would be included in the definition of "fishery products" if the parenthetical clause were modified to read as follows: "(including fish, mollusks, crustacea, *aquatic plants and animals, and any products thereof, including processed and manufactured products*)". [New matter in italics.]

Statement of Representative Robert L. F. Sikes of Florida

Mr. Chairman, I appreciate this opportunity of expressing my views on the bills which are now being considered by your subcommittee to provide additional funds for research and development in the commercial fishing industry in the United States.

Fishing is big business in Florida. In 1952, for instance, 256,380,000 pounds were caught for a dollar value of $25,744,000. In 1951, the catch was worth $22,163,000. Yet, for the entire country, only $175,000 was spent for research and development in this field. I think something should be done about the red tide which menaces fishing off the Florida gulf coast. Right now, some emergency money is being spent on this problem, but the research should continue on a long-range plan until the situation is corrected.

New fishing grounds should be explored, and study should be initiated of methods of freezing shrimp at sea in the Gulf of Mexico to prevent spoilage. Methods might also be found of handling, freezing, and packaging southern

oysters to broaden the market beyond the now purely local distribution of the fresh product.

Unfortunately, the commercial fishing industry is operating under certain outmoded acts and laws that should be changed. At present, the amount of $175,000 a year for research is limited by an act of 1939. At that time the imports from fishery products totaled $40 million. Since then they have increased to over $200 million. Yet, the $175,000 figure has remained the same.

Several bills have been introduced in Congress to help correct this inequity. Under these bills it is estimated that the commercial fishing industry will get in the neighborhood of $4 million for research and development.

I can't speak too strongly in favor of this legislation. Fishing is an important business in Florida. We should do everything we can to keep our present industry expanding to fit into the expanding economy of the Nation and to take advantage of the ever increasing markets.

I hope something will come out of this Congress which will give due recognition to the importance of this industry to our future national economy.

Mr. NORBLAD. The subcommittee will stand adjourned. Thank you very much, sir.

(Thereupon, at 12:45 p. m., the subcommittee adjourned subject to the call of the Chair.)

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